



SOCIETY FOR MARKETING ADVANCES



SMA 2025 Annual Conference

All In on Experience: Betting on Consumer Insight and Engagement

November 5-8, 2025, Las Vegas, NV

Mark J. Pelletier, Program Chair



All In on Experience: Betting on Consumer Insight and Engagement

Melanie B. Richards, Editor

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Hi SMA Members,

Thank you for making SMA 2025 in Las Vegas such a memorable conference. Vegas is the ultimate experiential destination, and it was a fitting backdrop for a program that was full of fresh ideas, sharp questions, and the kind of conversations that start in a session and continue in the hallway, over coffee, and sometimes well past dinner.

What I appreciated most was the mix of rigorous research, practical insights, and a genuine willingness to engage with one another's work. That is what keeps SMA feeling like SMA. I'm grateful to everyone who submitted manuscripts, served as reviewers, chaired sessions, and helped keep the program moving. It's not always glamorous work, but it is the work that makes the conference strong.

A special thank you to the colleagues who led the Doctoral Consortium and the pre-conference workshops. Those sessions are where we see the future of the field taking shape, and they only work when senior scholars are generous with their time and feedback. If you were part of that effort, thank you for investing in our emerging scholars.

I also want to recognize the journal editors and sponsoring partners who supported the conference and helped us offer programming that served both research and professional development. Their involvement strengthens SMA and expands what we can do for members each year.

On a personal note, being Program Chair was a lot, but it was also genuinely fun to do with this group. I'm still finding conference-related emails in my inbox. I'm grateful to the Executive Committee and the many SMA members who stepped in, solved problems quickly, and made the conference run smoothly behind the scenes.

I'm looking forward to continuing the momentum we built in Las Vegas, and to seeing you at our next SMA gathering. Until then, thank you again for showing up, sharing your work, and making this community what it is.

A handwritten signature in black ink, appearing to read 'M. Pelletier', with a stylized, flowing script.

Mark Pelletier
Program Chair, SMA 2025
President Elect, Society for Marketing Advances

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SMA Distinguished Scholar Recipients

The Society for Marketing Advances takes immense pride in recognizing and celebrating the distinguished scholars who have left indelible marks in marketing. These visionary individuals have elevated the discourse within our community and blazed trails for future generations. Discover the eminent personalities who have reshaped the marketing landscape with their groundbreaking contributions.

Joseph F. Hair, Jr., 2025	Peter Golder, 2012
Eli Jones, 2024	Terry L. Childers, 2011
Linda Price, 2023	Michael J. Polonsky, 2010
David Wooten, 2022	A Parasuraman, 2009
Lisa Scheer, 2021	Katherine Lemon, 2008
Michael Ahearne, 2020	David Stewart, 2007
Christine Moorman, 2019	Jagdish Sheth, 2006
Ruth N. Bolton, 2018	Roland Rust, 2005
Donald R. Lehmann, 2017	Jan-Benedict Steenkamp, 2004
V. Kumar, 2016	Yoram (Jerry) Wind, 2003
Richard P. Bagozzi, 2015	Shelby Hunt, 2002
J. Craig Thompson, 2014	Sharon F. Beatty, 2001
Russell W. Belk, 2013	Philip Kotler, 2000

SMA Distinguished Fellows

The Society for Marketing Advances celebrates its Distinguished Fellows — luminaries who have profoundly influenced the marketing world. Through visionary insights and impactful research, they've enriched our discourse and paved the way for future trailblazers. Explore the legacies of those who've contributed to the advancement of our field.

Lucy M. Matthews 2024
Brian Rutherford 2023
Jeff Tanner, 2022
Pia A. Albinsson, 2021
Diane R. Edmondson, 2020
Kevin J. Shanahan, 2020
Christopher D. Hopkins, 2019
Michael R. Solomon, 2017
Sharon E. Beatty, 2014
Alvin J. Williams, 2009
Denise T. Smart, 2007
Greg W. Marshall, 2005
Jean-Charles Chebat, 2003
Barry J. Babin, 2002
William C. Moncrief III, 2002
David J. Ortinau, 2001
Ronald D. Taylor, 2001
Michel Laroche, 2000
William J. Kehoe, 1998

SMA Distinguished Service Recipients

The Society for Marketing Advances is deeply honored to acknowledge those who have provided Distinguished Service to our field. Their selfless dedication and enduring impact have not only enhanced our community but have also set a gold standard for commitment and excellence. Explore the remarkable individuals who've devoted themselves to advancing the world of marketing.

Christopher D. Hopkins, 2025	William J. Kehoe, 1998
Barbara Ross Wooldridge 2024	Robert A. Robincheaux, 1997
J. Charlene Davis 2023	O. C. Ferrell, 1997
William C. Moncrief 2023	Donald P. Robin, 1995
Greg W. Marshall, 2022	Donald P. Robin, 1995
William (Bill) Kehoe, 2021	Linda E. Swayne, 1995
Linda Swayne, 2020	Arch G. Woodside, 1994
Alvin J. William, 2019	Charles S. (Stan) Madden, 1993
Sharon E. Beatty, 2014	Ronald F. Bush, 1993
Alvin J. Williams, 2009	William M. Pride, 1991
Denise T. Smart, 2007	Joseph F. Hair, Jr., 1990
Greg W. Marshall, 2005	William D. Perreault, Jr., 1989
John R. (Rusty) Brooks, Jr., 2018	William R. Darden, 1989
Barry J. Babin, 2002	William O. Bearden, 1988
William C. Moncrief III, 2002	Fred D. Reynolds, 1987
David J. Ortinau, 2001	Morris L. Mayer, 1986
Ronald D. Taylor, 2001	J. Barry Mason, 1984
Michel Laroche, 2000	Edward W. Cundiff, 1980

SMA 2025 Special Issues

International Journal of Advertising
Journal of Marketing Management
Marketing Education Review
Journal of Marketing Theory and Practice
Journal of Consumer Marketing
International Journal of Pharmaceutical and Healthcare Marketing

Events and Event Chairs

Doctoral Dissertation Proposal Competition

Christopher Newman - University of Mississippi
Lou E. Pelton-University of North Texas

Steven J. Shaw – Joe Hair Best Paper in Conference
Joe F. Hair, University of South Alabama

37th Annual Doctoral Consortium

Pia A. Albinsson - Appalachian State University
Sharon Beatty - University of Alabama
Christopher Hopkins - Auburn University

Teaching Tracks and Track Chairs

Innovations in Teaching Competition
Larry Neale - Queensland University of Technology

Distinguished Teaching Competition
Cindy Rippé – University of Georgia
Barb

SMA Teaching Moments
Michelle Sullivan- East Tennessee State University
Jen Riley- Vanderbilt University

Wednesday Workshops

Morning: Finding Novel Research Ideas – Congo I & II

Where do brilliant research ideas really come from? The truth is—they're hiding in plain sight. Whether it's a personal story, a headline-grabbing news item, or an everyday observation, the seeds of groundbreaking research are all around you.

Join **Dr. Merlyn Griffiths** and **Dr. Sarah Lefebvre** for a dynamic, hands-on workshop designed to help you unlock your creative potential and uncover fresh, innovative research ideas that matter. Discover how to harness the power of lived experience and current events to create research that resonates, engages, and makes a transdisciplinary impact.

This isn't your typical lecture—come ready to think differently, collaborate, and ignite the spark that leads to your next big idea.

Afternoon: AI in Marketing – Congo I & II

The conversation around Generative AI has shifted from whether to use this transformative technology to how quickly we can begin integrating it into our professional practice. This session introduces the Generative AI Certificate Program, designed to equip faculty with the skills to incorporate AI into course development, research, and student instruction.

Join facilitators **Dr. Dana Harrison**, **Dr. Melanie Richards**, and **Dr. Martin Key** for a practical discussion and exploration of AI's role in marketing education and research. Learn how to responsibly and effectively leverage Generative AI tools to enhance learning outcomes, drive innovation, and prepare students for the evolving marketing landscape.

2025 Track Chairs

ARTIFICIAL INTELLIGENCE AND MARKETING

- Atefeh Yazdanparast Ardestani — Clark University
- Sphurti Sewak — Illinois State University

BRANDING AND IMC

- Sona Klucarova — University of Nebraska at Omaha
- Cheryl-Iyn Ngho — Cal Poly
- Catherine Hessick — Muhlenberg College

CONSUMER BEHAVIOR

- Gary Futrell — Valdosta State University
- Lisa Scribner — University of North Carolina Wilmington
- Laura Boman — Kennesaw State University

DIGITAL MARKETING

- Lubna Nafees — Appalachian State University

DOCTORAL STUDENT RESEARCH (Mathew Joseph Award)

- Jamie Grigsby — Missouri State University

THE EXPERIENCE ECONOMY

- Robert Wixel Barnwell — Longwood University
- Kenneth Graham — University of Wisconsin-La Crosse

INFLUENCER MARKETING

- Sandy Sen — Southeast Missouri State University
- Holly A. Syrdal — Texas State University

LUXURY CONSUMPTION

- Aniruddha Pangarkar — University of Wisconsin-Green Bay

SOCIALLY RESPONSIBLE MARKETING UNDER CONDITIONS OF AI

- Jie G. Fowler — Valdosta State University
- Himadri Roy Chaudhuri — XLRI School of Management
- Mark J. Pelletier — University of North Carolina Wilmington

MARKETING AND PUBLIC POLICY

- Xiaoxu Wu — Colorado State University
- Alec N. Slepchuk — University of Louisiana at Lafayette

MARKETING STRATEGY

- Brandon Z. Holle — Belmont University
- Muhammad M. Mollah — California State University, Los Angeles

MARKETING EDUCATION

- Ania Rynarzewska — Georgia College & State University

SALES

- Simran Kaur — Monash University Malaysia

SERVICES MARKETING

- Udit Sharma — University of South Florida

SENSORY MARKETING

- Subhash Jha — The University of Memphis

RETAILING

- Charles A. Ingene — The University of Oklahoma
- Rhiannon Mesler — University of Lethbridge

TOURISM, HOSPITALITY, FOOD, MUSIC & SPORTS MARKETING

- Shannon McCarthy — University of Central Missouri

SPECIAL SESSIONS / PANEL PROPOSALS

- Linda (Joie) Hain — Clayton State University

DISTINGUISHED TEACHING

- Cindy B. Rippé — University of Georgia

INNOVATION IN TEACHING COMPETITION

- Larry Neale — Queensland University of Technology

MARKETING FUTUROLOGY AND PHILOSOPHY

- Michael Hyman — President, Institute for Marketing Futurology and Philosophy

TEACHING MOMENTS

- Michelle Sullivan — East Tennessee State University
- Jen Riley — Vanderbilt University

DISSERTATION COMPETITION

- Lou E. Pelton — University of North Texas
- Christopher Newman — University of Mississippi

37TH ANNUAL DOCTORAL CONSORTIUM

- Pia A. Albinsson — Appalachian State University
- Sharon Beatty — University of Alabama
- Christopher Hopkins — Auburn University

2025 SMA RUSTY BROOKS DISTINGUISHED SERVICE AWARD

Christopher D. Hopkins



Dr. Christopher D. Hopkins, (Ph.D. Mississippi State University), is the Jean Howard Lowe Professor of Marketing at Auburn University. Prior to joining Auburn's Harbert College of Business, he spent 16 years at Clemson University.

As a member since 1998, Hopkins is a past president of the Society for Marketing Advances, he has served as program chair, treasurer and multiple terms on the Board of Governors. He has chaired the Meet the Editors session nine times, the doctoral consortium eight times and has served on the consortium faculty thirteen times. In 2019, he was named an SMA Distinguished Fellow. He was three times awarded the Steven J. Shaw Best Paper in Conference award and has been awarded 16 best paper in track awards.

With more than 50 refereed journal articles and 64 conference proceedings, Dr. Hopkins' work has appeared in the *Journal of the Academy of Marketing Science*, *Journal of Business Ethics*, *Journal of Business Research*, *European Journal of Marketing*, *Journal of Advertising*, *Journal of Public Policy and Marketing*, *Psychology and Marketing*, *Journal of Personal Selling and Sales Management*, *Journal of Supply Chain Management*, *Journal of Marketing Education*, *Journal of Marketing Theory and Practice*, and *Marketing Education Review*. He further received Article of the Year awards from the *Journal of Marketing Education*, *Journal of Consumer Marketing*, and *Marketing Education Review*.

As a motivated educator, Dr. Hopkins has been awarded teaching excellence awards from both Auburn and Clemson Universities. Hopkins was a CUSHR Faculty Scholar and was named the College of Business Outstanding Emerging Scholar, twice named MBA Professor of the Year and voted "Best Professor on Campus," while on the faculty at Clemson University. He also served as Chair of the Marketing Department at Auburn University and is a former editor-in-chief of the *Journal of Marketing Theory and Practice*. He served seven years as an associate editor of the *Journal of Business Research* and is the current editor-in-chief of *Marketing Education Review*. He also serves on multiple editorial review boards.

2025 SMA Reviewers

Minghao Wang
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Susana Jaramillo
Jason Shin
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Q. Neo Bui
Lixun Su
Ahmer Ali
Anh Dao Kim
Lavy Khoushinsky
Joby John
Sarah Slough
Jeffrey Anderson
Aileen Torrance
Alyssa Piel
Yuru Shi
Venessa Melton
Mei Xu
Carissa Kim
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Shiekh Shahriar Ahmed
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Rachel Ramey
Kerry Manis

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Rajagopal Rajagopal
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Soochan Choi
Andrew Byungwook Chung
Lucie Ozanne
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**2025 SMA / ROUTLEDGE-
TAYLOR & FRANCIS
DISTINGUISHED SCHOLAR
AWARD RECIPIENT**

Joseph F. Hair, Jr.



Joseph F. Hair, Jr. is the Director of the Ph.D. Program in Business Administration, Mitchell College of Business, University of South Alabama, U.S.A. He is ranked #1 globally by Clarivate Analytics in Marketing, Multivariate Data Analysis, SEM and PLS-SEM. Joe has been active for many years in the SMA, having served as President, Treasurer, Secretary, Proceedings Editor, Fellow, and Chair/Member of the SMA Board of Governors. His career citations exceed 546,000 and his H-Index is 143 and I-10 is 611. Joe has published over 135 editions of his books, including *Multivariate Data Analysis*, Cengage Learning, U.K., 8th edition 2019; *Essentials of Marketing Research Methods*, McGraw-Hill, Inc., 7th edition 2026; *Essentials of Business Research Methods*, Routledge, 5th edition 2024; *A Primer on Partial Least Squares Structural Equation Modeling*, Sage, 4th edition forthcoming, 2026; *Advanced Issues in Partial Least Squares Structural Equation Modeling*, Sage, 2nd edition, 2024; *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R*, Springer, forthcoming 2026; and *Essentials of Marketing Analytics*, 2nd edition, McGraw-Hill, 2024. He has published 140+ articles in scholarly journals such as the *Journal of Marketing Research*, *Journal of Academy of Marketing Science*, *Organizational Research Methods*, *Harvard Business Review*, *European Journal of Marketing*, *Journal of Family Business Strategy*, *Journal of Marketing Theory & Practice*, *European Management Journal*, and others. He is currently co-authoring a new book on *Analytics Based Selling in the Era of Big Data*, Sage, forthcoming 2026.

AWARD WINNING PAPERS

Doctoral Dissertation Proposal Competition – Winner

The Role of Product Salience in Marketing Stigmatized Products

Manaswini Acharya

Innovations in Teaching Competition – Winner

Using AI to Reach More Students: Engaging Students Through Music and Podcasts

Bryan McLeod

Distinguished Teaching Competition – Winner

Value Density: A Teaching Philosophy in Action

Scott Cowley

Best Paper in AI and Marketing – Co-Winners

The Persuasive Power of AI Humor: Revisiting the Elaboration Likelihood Model in Consumer-AI Communication

Tyler Hancock

Iryna Pentina

The Role of Anthropomorphism in Shaping Social Categorization of Generative AI Customer Service Agents

Giovanni Latorre

Alessandra Lisanti

Best Track Paper in Branding and IMC

The Price of Access: Identity Tensions and Brand Dilution in the Eyes of Brand Owners

Jennifer Stevens

Stacie Waites

Michael Breazeale

Joel Collier

Best Paper in Experience Economy

African Bars: The Role of Environmental Triggers and Social Dynamics

Alphonse Mefoute Badiang

Best Paper in Marketing Analytics

Using Real-Time Analytics to Create the Perfect Customer Experience

Sujata Ramnarayan

Best Paper in Consumer Behavior

Too Far Awaat or Too Restrictive? Why Consumers Say No to Bundles

Abigail Torres Rico

Martha Troncoza

Kristin Stewart

Best Paper in Marketing Futurology

Losing the True Value: Aligning Psychometric Theory with Modern Measurement Philosophy
Aliosha Alexandrov

Best Paper in Luxury Consumption

Modulating Customer Relationships in Selling Quiet Luxury Brands
Ananya Rajagopal
Rajagopal Rajagopal

Best Paper in Marketing Strategy

When Universities Hire CMOs: A 12-Year Study of Marketing Leadership in Public Universities
Aisha Ghimire
Prachi Gala
Cong Feng

Best Paper in Retail

Franchising and Black Entrepreneurship: A Critical Examination of Barriers and Opportunities
Pam Richardson-Greenfield
Natalie Baucum

Best Paper in Sales

Salesperson Motivation Changes During the Early Employment
Claire Cha
Thomas Brashear Alejandro

Best Paper in Sensory Marketing

EEG and Eye-Tracking Data Processing and the Impact of Task Complexity: A Comparative Analysis of ARIMA vs. Ensemble Models (LSTM + RF)
Tsolmon Sodnomdavaa
Gunjargal Lkhagvadorj
Tserennyam Sukhbaatar
Tamir Ariunsukh

Best Paper in Influencing Marketing

Social Comparison and Influencers in Modern Luxury Consumption
Costinel Dobre
Anca Maria Milovan
Gheorghe Preda
Amanda Agapie
Mihai Orzan
Maria Petrescu

Best Paper in Marketing Education

Escape Rooms in the Classroom: An Interactive Learning Experience
Luke Liska
Haley Gilley

Maneesh Thakkar
Zhihao Yu
Chu-Yen Pai

Best Paper in Tourism, Hospitality, Food, Music, & Sports Marketing

Betting on Virtual Bites: How Ghost Kitchens Gain Loyalty through Credibility and Congruence
Wei Wang

Best Paper in Marketing and Public Policy

Betting Against the Odds: The Hidden Dangers of Sports Bookmaker Promotions
Alexander Hanson
Christine Ringler

Best Paper in Digital Marketing

The Distracting Influencer: Visual Framing and Consumer Socialization in Influencer Marketing
Ania Izabela Rynarzewska
Lubna Nafees
Todd Bacille

Sharon E. Beatty Best Paper in Services Marketing

Robots or Humans? How Social Exclusion Shapes Consumer Preferences in Service Encounters
Tangwutu Yang
Yi Li
Zhihao Yu

Matthew Joseph Best Paper Award in Doctoral Student Research

When Mentions Backfire: How Branded @Mentions Shape Perceived Manipulation and Engagement
Ali Soltaninejad
Bryan Hochstein
Carol James
Michael Peasley

Steven J. Shaw Best Paper in Conference

The Distracting Influencer: Visual Framing and Consumer Socialization in Influencer Marketing
Ania Izabela Rynarzewska
Lubna Nafees
Todd Bacille



FROM THE EDITOR

During the Society for Marketing Advances 2025 annual conference, we came together in Las Vegas, Nevada, to engage with scholarships that advance our understanding of how marketing research and practice continue to evolve in today's dynamic environment. The 2025 conference theme, *"All In on Experience: Betting on Consumer Insight and Engagement,"* provided a timely forum for exploring how insight, engagement, innovation, and emerging technologies are shaping meaningful customer experiences. This year's program brought together scholars and practitioners from more than **13 countries and 39 U.S. states**, reflecting the global reach and interdisciplinary nature of our field.

These Proceedings represent the insightful and forward-thinking research presented during the conference. The work showcased in the following pages spans a diverse range of important topic areas, including artificial intelligence and marketing, branding and integrated marketing communication, consumer behavior, marketing analytics, marketing education, digital marketing, experiential marketing, and many other topics driving innovation and impact in the discipline.

I want to extend my sincere appreciation to the authors and presenters for sharing their scholarship, to the reviewers for their thoughtful evaluation of submissions, and to the SMA executive members and board of governors for their leadership and support in making this conference a success.

Thank you for your continued commitment to the Society for Marketing Advances. Please join us for **SMA 2026**, held **November 4–7 in Orlando, FL**, to network with fellow scholars, attend outstanding workshops, and continue advancing the field of marketing. More information about the 2026 conference will be available soon.

Kind regards,

Melanie B. Richards
SMA Proceedings Editor

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SESSION 11.1: CONSUMER ENGAGEMENT, IDENTITY, AND WELL-BEING

Moderators:

Aisha Ghimire

Summary Brief

Therapeutic knitting: The social and wellness functions of yarn stores in the US

Xiaoxia Song, Shanghai University of Engineering Science, China
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This research explores the therapeutic aspects of hand knitting as facilitated by yarn stores across the US. It employs mixed methods, incorporating observations and interviews with the store owners or managers of five prominent yarn stores located in Minnesota, Tennessee, New Mexico, Nevada, and California. Findings revealed that these stores engage knitters or shoppers socially, professionally, and emotionally, such as providing seasonal knitting-themed or culturally relevant displays, dedicated and intentionally curated maker spaces, mini collections of samples, small libraries of knitting instructions, and exhibits of traditional loom and fiber arts. Additionally, all stores have friendly and knowledgeable staff, skilled in quick relationship building and providing a soothing atmosphere. They also engage shoppers in the digital realm, featuring digital tutorials, promotions, and social events. The therapeutic and social functions of knitting are manifested in these store operations and unique place-based identities.

A marginalized area in fashion ecology, hand knitting provides important social and wellness benefits that have long been overlooked. Knitting has been gaining popularity, with approximately 40 million people identified as active knitters in the US (VAWAA, 2019). This research explores the therapeutic aspects of hand knitting as facilitated by yarn stores across the US. One of the researchers visited five prominent yarn stores located in Minnesota, Tennessee, New Mexico, Nevada, and California in 2024. The study employed a mixed-methods approach, incorporating observations of store merchandising and customer service, promotional activities, and digital channels, as well as informal interviews with the store owners or managers.

Findings revealed that these stores use a variety of strategies to engage knitters or shoppers socially, professionally, and emotionally, such as providing seasonal knitting-themed or culturally relevant displays, dedicated and intentionally curated maker spaces, mini collections of samples, small libraries of knitting instructions, and exhibits of traditional loom and fiber arts (see Fig. 1). Additionally, all stores had friendly and knowledgeable staff, skilled in quickly building personal connections with shoppers and providing a soothing atmosphere. Patrons of these stores do not use the stores as merely a retail outlet for yarn purchase; they use them as a social and creativity hub, in which they find ways to express their creativity, socialize with like-minded peers, and find a sense of belonging and deep relaxation. Shoppers are also engaged in the digital realm, where store management provides digital media tutorials, various promotions and social events. The therapeutic and social functions of knitting are manifested in these yarn store strategies for merchandising and management. More directly, at a knitting table, one woman shared how the calming and soothing effects of knitting contributed to lowering her high blood pressure. These findings echo the results of previous studies, which showed positive effects of knitting in possibly slowing the progression of dementia, as well as enhancing social relationships and bonding (see Court, 2020; Gjernes, 2017). Each store has exhibited its place-based identity, which features specialized merchandising and operations.

Funding support: The Sping Lin and Ying-Ngoh T. Lin China Center Visiting Scholars Initiative at the University of Minnesota



Figure 1. A Halloween-themed display made of yarns outside of Darn Knit Anyway, MN

References

- Court, K. (2020). Knitting two together (k2tog), “if you meet another knitter you always have a friend”. *Textile*, 18(3), 278-291.
- Gjernes, T. (2017). Knitters in a day center: the significance of social participation for people with mild to moderate dementia. *Qualitative health research*, 27(14), 2233-2243.
- VAWAA.com (September 23, 2019). Why knitting matters now more than ever. Retrieved February 16, 2025: <https://vawaa.com/blog/why-knitting-matters-now-more-than-ever>

SESSION 11.2: ETHICAL AI, EMPATHY, AND CONSUMER RESPONSES

Moderators:

Kerry Manis

Summary Brief

Empathy Without Eyes: Perceived Non-Judgment and Empathy from GenAI and Its Effects on Consumer Self-Esteem

Alex Tran, University of Portland, USA
Danielle Hass, West Virginia University, USA
Ashley Hass, Ph.D., University of Portland, USA

This study explores how interactions with generative AI impact users' self-esteem and well-being through emotional disclosure. We propose that AI's perceived empathy and non-judgment foster psychological safety, encouraging users to share imperfections. This vulnerability may reduce perfectionist pressure and, in turn, enhance self-esteem. Prior research shows users are more open with AI than humans due to its neutrality and lack of social evaluation. Our model outlines the mediating roles of perceived empathy and non-judgment, contributing to the growing literature on the emotional impacts of human–AI interaction.

Introduction

As generative AI (GenAI) becomes embedded in daily life, its psychological effects on users are gaining attention. GenAI refers to models that create new content, such as text or images (Susarla et al., 2023), and tools like ChatGPT are now influencing emotional expression, decision-making, and self-perception (Herman & Puntoni, 2024). While these technologies offer utility and companionship (Hu et al., 2025), they also raise questions about their impact on users' well-being and self-esteem, with research suggesting AI can both comfort and unsettle depending on its design (Liu-Thompkins et al., 2022; Köbis et al., 2021).

This research explores whether disclosing imperfections to generative AI can reduce perfectionist pressure and improve self-esteem. Users often see AI as neutral, logical, and nonjudgmental (Papneja et al., 2024), unlike human counterparts who may provoke fear of judgment. This perceived safety may make GenAI a unique outlet for vulnerability, especially when responses feel empathetic (Barry, 2025). We propose that perceived empathy and non-judgment mediate the relationship between imperfection disclosure and psychological outcomes, offering new insights into the emotional effects of human–AI interaction.

Background

Generative AI & Well-Being

Well-being is a multidimensional state characterized by positive emotions and life satisfaction, combined with meaning and engagement and trust and belonging (Huppert & So, 2011). Generative AI has the potential to enhance self-esteem by fostering emotional fulfillment and reducing feelings of isolation. Research shows that users form parasocial bonds with chatbots (Lee & Park, 2022) and emotionally attach to AI speakers, leading to greater trust, satisfaction, and connection (Kim et al., 2022). When designed with emotional intelligence and empathy, AI can simulate supportive human interaction, offering users a sense of being understood. Liu-Thompkins et al. (2022) emphasize that empathetic AI, capable of recognizing and responding to users' emotions, not only improves affective experience but also strengthens trust and comfort. Together, these effects suggest that emotionally responsive generative AI can alleviate stress and contribute meaningfully to improved self-worth and psychological well-being.

Generative AI & Self-Esteem

Self-esteem is an individual's subjective evaluation of their worth, including beliefs about themselves and emotions like pride or shame (American Psychological Association, 2023). Consumers' perceptions of AI vary by task, shaping their self-confidence and self-esteem. Longoni and Cian (2022) found that AI is seen as competent for practical tasks but less so for creative or enjoyment-related ones. As a result, users may defer to AI and feel less critical of themselves in trusted domains but maintain or boost their own confidence in areas where AI is viewed as weaker. Similarly, Peng et al. (2022) notes how there is resistance to AI for tasks requiring emotional warmth. These findings suggest generative AI can indirectly influence self-esteem depending on perceived AI capability and task type.

Potential Implications

This research has the potential to add to both marketing theory and practice in a number of ways. This study advances the understanding of how generative AI can serve as an emotional support system by examining the pathways through which user disclosures of imperfections influence perceived empathy and non-judgment. By empirically testing these relationships, this research bridges gaps in marketing and human-computer interaction literature around AI's psychological impacts beyond task efficiency. Practically, our work informs the design of generative AI systems that foster empathetic and non-judgmental user experiences, offering novel strategies to support users struggling with perfectionism. Ultimately, this study highlights the potential for generative AI to promote healthier self-perceptions and well-being, encouraging future research on compassionate AI interventions in consumer contexts.

References

- American Psychological Association. (2023). *APA Dictionary of Psychology*. Apa.org. <https://dictionary.apa.org/self-esteem>
- Barry, E. (2025, February 24). *Human Therapists Prepare for Battle Against A.I. Pretenders*. Nytimes.com; The New York Times. <https://www.nytimes.com/2025/02/24/health/ai-therapists-chatbots.html>
- Hu, D., Lan, Y., Yan, H., & Chen, C. W. (2025). What makes you attached to social companion AI? A two-stage exploratory mixed-method study. *International Journal of Information Management*, 83, 102890–102890. <https://doi.org/10.1016/j.ijinfomgt.2025.102890>
- Huppert, F. A., & So, T. T. C. (2011). Flourishing Across Europe: Application of a New Conceptual Framework for Defining Well-Being. *Social Indicators Research*, 110(3), 837–861. <https://doi.org/10.1007/s11205-011-9966-7>
- Kadji, C., Schmid Mast, M. (2021). The Effect of physician self-disclosure on perceived empathy in patient consultations. *Patient Education and Counseling*, 104(4), 2224–2231. <https://doi.org/10.1016/j.pec.2021.02.030>
- Khossousi, V., Greene, D., Shafran, R., Callaghan, T., Dickinson, S., Egan, S. J. (2024). The relationship between perfectionism and self-esteem in adults: a systematic review and meta-analysis. *Behavioural and Cognitive Psychotherapy*, 52(6), 646–665. doi:10.1017/S1352465824000249
- Kim, J., Kang, S., Bae, J. (2022). Human likeness, attachment, and perceived interactivity on consumer responses to AI speakers. *Journal of Business Research*, 144, 797–804. <https://doi.org/10.1016/j.jbusres.2022.02.047>
- Laurenceau, J. P., Barrett, L. F., Pietromonaco, P. R. (1998). Intimacy as an interpersonal process: The importance of self-disclosure, partner disclosure, and perceived partner responsiveness in interpersonal exchanges. *Journal of Personality and Social Psychology*, 74(5), 1238–1251. <https://doi.org/10.1037/0022-3514.74.5.1238>
- Lee, H., & Park, J. (2022). Do parasocial relationships and the quality of communication with AI shopping chatbots determine middle-aged women consumers' satisfaction and continuance usage intentions? *Journal of Consumer Behaviour*, 21(5), 842–854. <https://doi.org/10.1002/cb.2043>
- Liu-Thompkins, Y., Okazaki, S. Li, H (2022). Artificial empathy in marketing interactions: Bridging the human-AI gap in affective and social customer experience. *Journal of the Academy of Marketing Science*, 50, 1198–1218. <https://doi.org/10.1007/s11747-022-00892-5>
- Longoni, C., Cian, L. (2022). Artificial intelligence in utilitarian vs. hedonic contexts: The “word-of-machine” effect. *Journal of Marketing Research*, 86(1), 91–108. <https://doi.org/10.1177/0022242920957347>
- Papneja, H., Yadav, N (2025). Self-disclosure to conversational AI: a literature review, emergent framework, and directions for future research. *Pers Ubiquit Comput* 29, 119–151 <https://doi.org/10.1007/s00779-024-01823-7>
- Peng, C., van Doorn, J., Eggers, F., Wieringa, J., (2022). The effect of required warmth on consumer acceptance of

- artificial intelligence in service: The moderating role of AI-human collaboration. *International Journal of Information Management*, 66. <https://doi.org/10.1016/j.ijinfomgt.2022.102533>
- Rose, A., McIntyre, R., & Rimes, K. A. (2018). Compassion-Focused Intervention for Highly Self-Critical Individuals: Pilot Study. *Behavioural and cognitive psychotherapy*, 46(5), 583–600. <https://doi.org/10.1017/S135246581800036X>
- Susarla, A., Gopal, R., Thatcher, J. B., & Sarker, S. (2023). The Janus effect of generative AI: Charting the path for responsible conduct of scholarly activities in information systems. *Information Systems Research*, 34(2), 399–408.
- Visvalingam, S., McHardy, H. L., Norder, S. J., Magson, N. R., & Norberg, M. M. (2022). A mixed methods study of an online intervention to reduce perfectionism. *Current Psychology*, 42(22), 18686–18701. <https://doi.org/10.1007/s12144-022-02953-y>
- Wang, Y., Wang, Y., Crace, K., & Zhang, Y. (2025). Understanding Attitudes and Trust of Generative AI Chatbots for Social Anxiety Support. *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems*, 1–21. <https://doi.org/10.1145/3706598.3714286>
- Woodfin V., Molde H., Dundas I., Binder, P-E. (2021) A Randomized Control Trial of a Brief Self-Compassion Intervention for Perfectionism, Anxiety, Depression, and Body Image. *Frontiers in psychology*, 12. 751294. <https://doi.org/10.3389/fpsyg.2021.751294>

SESSION 11.3: SIGNALS & STORIES: AI'S PERCEPTION, PREDICTION, AND PRACTICE

Moderators:

Catherine Hessick

Full Paper

Responsible AI and Healthcare Marketing: Exploring Attitudes and Intentions of Medical Professionals

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This study looks at why healthcare professionals in Saudi Arabia are adopting artificial intelligence (AI) and its relatedness to the Vision 2030. Even though AI has the promise of improving the accuracy of diagnosis, delivery of services, and patient satisfaction, its use has been hampered by infrastructural, talent, and data governance issues. We examined the influence of responsible AI beacons and personal innovativeness (reasons to) and the impact of privacy concerns (reasons not) towards the adoption of AI. The results demonstrate that responsible AI signals and personal innovativeness are powerful predictors of positive attitudes and intentions towards AI usage. The attitude is, however, not seriously influenced by privacy concerns, reflecting the need for ethical communication of AI benefits and the development of an innovation-friendly culture. Also, hospital executives are recommended to conduct strategic marketing, training, and narration campaigns to build trust and acceptance of AI-based technology. This study can add to the theoretical and practical knowledge as it establishes AI enablers and barriers to its implementation and places AI as a strategic branding tool in healthcare marketing, more than as a technological tool, and presents a way toward service differentiation in a more digitalized healthcare world.

Introduction

Artificial intelligence (AI) is transforming the experience in healthcare by improving the relationship between patients and providers, optimizing the administrative tasks, and allowing greater medical accuracy (Chalutz-Ben Gal and Margheritta, 2025). Due to the growing penetration of AI technologies into the hospital system, they are used not only in clinical practice but also to transform healthcare delivery as a service being marketed, leading to the enhancement of the quality of services delivered, their cost-effectiveness, and the satisfaction of patients receiving these services. It is against this light that AI becomes a strategic marketing force, which enables healthcare providers to bring forth personalized, timely, and trusted services that will achieve evolving consumer demands (Kulkov et al., 2024).

The healthcare sector in Saudi Arabia views AI and data analytics as key methods for transforming service provision and enhancing consumer involvement, aligning with the Vision 2030 reform objectives. These tools are helping the hospitals to make fewer delays in offering their services, accurate diagnoses, and ease in work by the healthcare staff. These developments also play a crucial role in making hospitals new professional brands that are gaining popularity among consumers and trust and loyalty in a digitally transformed healthcare system. Nevertheless, there are certain pitfalls to the assimilation of AI in terms of healthcare marketing and operations.

Since the future of implementing AI is when it will be fully integrated into the hospital's ecosystem, the research on identifying the behavioral determinants of healthcare practitioners embracing AI should be conducted. Based on the theory of behavioral reasoning (BRT), the paper seeks to examine the role played by cues to responsible AI use, innovativeness, and privacy awareness in shaping the attitude of healthcare personnel towards the acceptance of AI. This research examines how healthcare staff react to responsible AI signaling combined with personal innovativeness factors and privacy concerns in their AI adoption attitudes. The research solves two primary objectives, which involve highlighting AI benefits for healthcare diagnostics and decision systems yet simultaneously addressing privacy and ethical issues. Hospitals need to examine both positive and negative factors that determine behavioral intentions because of how these dual elements impact actions in healthcare facilities. This study will offer practical guidance to marketers and policymakers who may want to achieve success in their endeavor to position AI-powered healthcare services in the minds of internal clients and external customers. This will be achieved by being able to avert enabling factors as well as address inhibiting factors.

Background

The BRT was proposed by Westaby (2005). BRT assists in understanding governance and thoughtful choice selection of leaders (Westaby et al., 2010). BRT has four main parts which are behavioral intentions, attitude, reasons

(both for and against), values and provides a vital connection between all four (Dhir et al., 2021). BRT implies that values affect attitude, which in turn has a significant role in behavioral intentions (Virmani et al., 2023). Hence, BRT provides a technique for assessing values, intentions, and attitudes in addition to reasons for/against and contends that values affect attitude, which in turn has a vital effect on behavioral intentions. Given the need to assess the behavior intention and attitude of healthcare professionals towards AI use in relation to the value to gain from AI use and the likely reasons for and reasons against AI use, we believe the BRT fits perfectly to achieve our research objectives. Value functions heavily in a person's decision-making in their individual life and in their career (Dhir et al., 2021). This research project has employed responsible AI principles of autonomy. One of the latest innovations reshaping organizational and healthcare operations is the adoption of artificial intelligence (AI). Defined as "a system's ability to correctly interpret external data, learn from it, and use that learning to achieve specific goals and tasks through flexible adaptation" (Haenlein & Kaplan, 2019), AI holds promise for improving efficiency and outcomes. However, it also raises concerns about social risks, algorithmic bias, and behavioral manipulation (Ghallab, 2019). These concerns have triggered widespread discussions on responsible AI, especially in response to high-profile failures—such as Amazon's AI recruitment tool that displayed bias against female candidates (Papagiannidis et al., 2025). Responsible AI is conceptualized as the structured integration of ethical norms and principles to ensure that AI use is appropriate, fair, and trustworthy. A central issue in responsible AI discussions is autonomy—not the independence of AI systems, but their ability to support human autonomy rather than override it (Floridi et al., 2018). In workplaces, AI tools can improve productivity and decision-making but also risk undermining user control (Calvo et al., 2020). To mitigate this, Floridi et al. (2018) argue for preserving a "veto power" for human users to retain decision-making authority. Especially in healthcare, this balance is critical; preserving autonomy supports practitioners' cognitive wellness and ethical decision-making (Weinstein & Ryan, 2010).

H1: Responsible AI signal has a positive effect on attitude towards the use of AI.

Reasons for Variables

Our research regards 'reasons for' to be personal innovativeness. Personal innovativeness is defined as "the degree to which the individual is receptive to new ideas and makes innovation decisions independently of the communicated experience of others" (Midgley & Dowling, 1978). It highlights the inclination of a person to utilize the latest innovations (Okumus et al., 2018). In the digital technology space, personal innovativeness influences the user's view of a given technology (Dabholkar & Bagozzi, 2002). Personal innovativeness plays an important function in innovation diffusion and favorably influences users' behavioral intention and attitude towards a tool (Ozturk et al., 2016). Hence, based on these reasons, we have incorporated personal innovativeness as a reason why an individual healthcare professional will engage with AI technology. Thus, the following hypothesis is formulated.

H2: Reasons for (personal innovativeness) have a positive effect on the attitude of healthcare workers towards the use of AI in the workplace.

Reasons Against Variables

This study employed privacy concerns as a "reason against" healthcare workers' attitudes towards AI. Privacy concern is said to be the reluctance to reveal private details (Dinev & Hart, 2005). Privacy has been an important factor for many years in the healthcare domain, as seen in the vow to guard patients' privacy. Latest inventions like AI and the increasing use of medical digital tools by companies and individuals like healthcare trackers may gather, save, assess, and disseminate data to external entities (Yassae & Mettler, 2019). Privacy concern is among the top bottlenecks in adopting and widespread use of AI in the medical profession (Ching et al., 2018). Hence, increasing privacy concerns about the use of AI in healthcare systems will serve as a reason for the negative attitude of medical professionals towards AI use. Thus, we propose the following hypothesis.

H3: Reasons against (privacy concerns) have a negative effect on the attitude of healthcare workers towards the use of AI at the workplace.

Attitude Towards AI & AI Adoption

Past literature has shown a significant favorable attitude linked with the readiness to be involved in a particular behavior (Tandon et al., 2020). Additionally, research has associated attitude with positively affecting consumer intentions (Basha & Lal, 2019; Tandon et al., 2020).

H4: Attitude has a positive effect on the intentions of healthcare workers to use AI in the workplace.

Data and Results

This study sample is gathered from healthcare practitioners in Saudi Arabia. We used partial least squares structural equation modelling (PLS-SEM). This was done in two steps. In the first step we validated the outer model also known as measurement model followed by structural model analyses-testing of hypotheses, see table 1 and table for measurement model analyses.

Table 1: Convergent Validity and Reliability

Variable	Items	VIF	Loadings	CR	AVE
Attitude	ATTITUDE2 <- ATTITUDE	1.249	0.748	0.783	0.549
	ATTITUDE3 <- ATTITUDE	1.261	0.82		
	ATTITUDE4 <- ATTITUDE	1.119	0.644		
Autonomy	AUTO1 <- AUTON	1.449	0.727	0.87	0.693
	AUTO2 <- AUTON	1.737	0.87		
	AUTO3 <- AUTON	1.917	0.891		
Explainability	EXPLAIN1 <- EXPLAIN	1.526	0.786	0.822	0.537
	EXPLAIN2 <- EXPLAIN	1.434	0.803		
	EXPLAIN3 <- EXPLAIN	1.279	0.649		
	EXPLAIN5 <- EXPLAIN	1.257	0.682		
Reasons for-Perceived Innovativeness	INNOVATE1 <- PI	1.19	0.749	0.808	0.513
	INNOVATE2 <- PI	1.252	0.777		
	INNOVATE3 <- PI	1.119	0.668		
Intention	INTENTION1 <- INTENTION	1.435	0.782	0.813	0.521
	INTENTION2 <- INTENTION	1.281	0.681		
	INTENTION3 <- INTENTION	1.185	0.701		
	INTENTION6 <- INTENTION	1.316	0.697		
Justice	JUSTICE1 <- JUSTICE	1.458	0.768	0.833	0.625
	JUSTICE2 <- JUSTICE	1.505	0.777		
	JUSTICE3 <- JUSTICE	1.24	0.681		
	JUSTICE4 <- JUSTICE	1.246	0.653		
Non-Maleficent	NONMAL1 <- NONMAL	1.64	0.827	0.826	0.545
	NONMAL2 <- NONMAL	1.432	0.779		
	NONMAL3 <- NONMAL	1.276	0.765		
Reason Against-Privacy Concern	PRVCON1 <- PConcern	1.546	0.809	0.776	0.537
	PRVCON2 <- PConcern	1.392	0.688		
	PRVCON3 <- PConcern	1.262	0.746		
	PRVCON4 <- PConcern	1.359	0.702		
Responsible AI Signals	AUTON <- AI Signals	3.263	0.909	0.939	0.794
	EXPLAIN <- AI Signals	3.668	0.92		
	JUSTICE <- AI Signals	2.689	0.881		
	NONMAL <- AI Signals	2.308	0.853		

Note: VIF: Variance inflated factor; CR: Composite reliability; AVE: Average variance extracted.

Table 2: Discriminant Validity-Fornell and Larcker

	ATTITUD E	AUTO N	EXPLAI N	INTENTIO N	JUSTIC E	NONMA L	PConcern	PI
ATTITUDE	0.741							
AUTON	0.708	0.832						
EXPLAIN	0.678	0.799	0.733					
INTENTIO N	0.682	0.745	0.685	0.716				
JUSTICE	0.661	0.738	0.753	0.666	0.722			
NONMAL	0.633	0.687	0.722	0.616	0.651	0.791		
PConcern	0.466	0.596	0.661	0.564	0.579	0.69	0.738	
PI	0.686	0.708	0.732	0.59	0.666	0.606	0.519	0.733

Note: AUTO: Autonomy; PConcern: Privacy Concern; PI: Perceived Innovativeness; NONMAL: Non-Maleficent; EXPLAIN: Explainability.

Once the measurement model was validated, we tested our proposed hypotheses. According to the findings in table 3, all relationships were found to have a significant effect except for reason against attitude (privacy concern), which was found to have an insignificant effect on AI use in healthcare ($\beta = -0.121$; $p > 0.05$); thus, H3 was not supported, whereas H1, H2, and H4 were supported.

Table 3: Hypotheses Testing

Relationships	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
AI Signals -> ATTITUDE	0.637	0.603	0.14	4.534	0**
Reasons for -> ATTITUDE	0.264	0.266	0.111	2.385	0.009*
Reason against -> ATTITUDE	-0.121	-0.093	0.118	1.02	0.154
ATTITUDE -> INTENTION	0.682	0.673	0.086	7.922	0**

Note: **: p value < 0.001; *: p value < 0.05.

Discussion

This theoretical work demonstrates how healthcare practitioners formulate their attitudes toward technological use based on positive artificial intelligence signals, which becomes crucial for understanding adoption in Saudi Arabia. The theoretical framework demonstrated how Saudi Arabia faces dual requirements to embrace AI for clinical practice because it matches global AI strategy developments and serves national requirements for contemporary healthcare operational effectiveness. The major impact of perceived innovativeness revealed through results demonstrates why healthcare organizations should prioritize building trust-based technological environments among their professionals.

For the purpose of marketing, it is necessary to establish the innovative, efficient, patient-centered nature of AI-driven healthcare services to acquire the trust of both internal and external stakeholders. The introduction of AI will be successful as well because technological infrastructure is not enough; brands and communication are also important as they address healthcare professionals and the general population. The introduction of AI should be positioned as an improvement of existing and value-adding services, as it enhances patient care and workforce. To achieve buy-in and drive the skepticism out, healthcare marketing campaigns that profile successful stories, patients, and professionals in the real world; point to ethical protections; and underscore the advantages of personal service will do a lot to help ease resistance and foster trust. By so doing, hospitals will be able to build their institutional reputation and brand loyalty in an increasingly digitized health-care environment.

References

- Alfahad, A. H., Alabbas, Y. S., Alabbas, H. S. M., Abukhashbah, T. H., Alabdali, A. A., Alfatieh, Q. M. H., ... & Alhazmi, K. M. A. (2024). Evaluating the impact of Saudi Vision 2030 on healthcare investment: A comprehensive review of progress and future directions. *Journal of Ecohumanism*, 3(8), 870–880.
- Basha, M. B., & Lal, D. (2019). Indian consumers' attitudes towards purchasing organically produced foods: An empirical study. *Journal of Cleaner Production*, 215, 99–111. <https://doi.org/10.1016/j.jclepro.2018.12.098>
- Calvo, R. A., Peters, D., Vold, K., & Ryan, R. M. (2020). Supporting human autonomy in AI systems: A framework for ethical enquiry. In *Responsible AI* (pp. 31–54). https://doi.org/10.1007/978-3-030-50585-1_2
- Chalutz-Ben Gal, H., & Margherita, A. (2025). The adoption of artificial intelligence (AI) in healthcare: A model of value assessment, human resource and health system factors. *Technology Analysis & Strategic Management*, 1–14.
- Ching, T., Himmelstein, D. S., Beaulieu-Jones, B. K., Kalinin, A. A., Do, B. T., Way, G. P., ... & Greene, C. S. (2018). Opportunities and obstacles for deep learning in biology and medicine. *Journal of the Royal Society Interface*, 15(141), 20170387. <https://doi.org/10.1098/rsif.2017.0387>
- Dabholkar, P. A., & Bagozzi, R. P. (2002). An attitudinal model of technology-based self-service: Moderating effects of consumer traits and situational factors. *Journal of the Academy of Marketing Science*, 30(3), 184–201. <https://doi.org/10.1177/0092070302303001>
- Dhir, A., Koshta, N., Goyal, R. K., Sakashita, M., & Almotairi, M. (2021). Behavioral reasoning theory (BRT) perspectives on E-waste recycling and management. *Journal of Cleaner Production*, 280, 124269. <https://doi.org/10.1016/j.jclepro.2020.124269>
- Dignum, V. (2017). Responsible autonomy. arXiv preprint. <http://arxiv.org/abs/1706.02513>
- Dinev, T., & Hart, P. (2005). Internet privacy concerns and social awareness as determinants of intention to transact. *International Journal of Electronic Commerce*, 10(2), 7–29. <https://doi.org/10.2753/JEC1086-4415100201>
- Fishbein, M., & Ajzen, I. (1977). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Addison-Wesley.
- Floridi, L., Cowls, J., Beltrametti, M., Chatila, R., Chazerand, P., Dignum, V., ... & Vayena, E. (2018). AI4People—An ethical framework for a good AI society: Opportunities, risks, principles, and recommendations. *Minds and Machines*, 28(4), 689–707. <https://doi.org/10.1007/s11023-018-9482-5>
- Ghallab, M. (2019). Responsible AI: Requirements and challenges. *AI Perspectives*, 1(1), 3. <https://doi.org/10.1186/s42467-019-0003-z>
- Haenlein, M., & Kaplan, A. (2019). A brief history of artificial intelligence: On the past, present, and future of artificial intelligence. *California Management Review*, 61(4), 5–14. <https://doi.org/10.1177/0008125619864925>
- Kulkov, I., Kulkova, J., Leone, D., Rohrbeck, R., & Menvielle, L. (2024). Stand-alone or run together: Artificial intelligence as an enabler for other technologies. *International Journal of Entrepreneurial Behavior & Research*, 30(8), 2082–2105.
- Kumar, P., Dwivedi, Y. K., & Anand, A. (2023). Responsible artificial intelligence (AI) for value formation and market performance in healthcare: The mediating role of patient's cognitive engagement. *Information Systems Frontiers*, 25(6), 2197–2220. <https://doi.org/10.1007/s10796-021-10136-6>
- Midgley, D. F., & Dowling, G. R. (1978). Innovativeness: The concept and its measurement. *Journal of Consumer Research*, 4(4), 229. <https://doi.org/10.1086/208701>

- Okumus, B., Ali, F., Bilgihan, A., & Ozturk, A. B. (2018). Psychological factors influencing customers' acceptance of smartphone diet apps when ordering food at restaurants. *International Journal of Hospitality Management*, 72, 67–77. <https://doi.org/10.1016/j.ijhm.2018.01.001>
- Ozturk, A. B., Nusair, K., Okumus, F., & Hua, N. (2016). The role of utilitarian and hedonic values on users' continued usage intention in a mobile hotel booking environment. *International Journal of Hospitality Management*, 57, 106–115. <https://doi.org/10.1016/j.ijhm.2016.06.007>
- Papagiannidis, E., Mikalef, P., & Conboy, K. (2025). Responsible artificial intelligence governance: A review and research framework. *The Journal of Strategic Information Systems*, 34(2), 101885. <https://doi.org/10.1016/j.jsis.2024.101885>
- Tandon, A., Dhir, A., Kaur, P., Kushwah, S., & Salo, J. (2020). Behavioral reasoning perspectives on organic food purchase. *Appetite*, 154, 104786. <https://doi.org/10.1016/j.appet.2020.104786>
- Virmani, N., Sharma, S., Kumar, A., & Luthra, S. (2023). Adoption of Industry 4.0 evidence in emerging economy: Behavioral reasoning theory perspective. *Technological Forecasting and Social Change*, 188, 122317. <https://doi.org/10.1016/j.techfore.2023.122317>
- Weinstein, N., & Ryan, R. M. (2010). When helping helps: Autonomous motivation for prosocial behavior and its influence on well-being for the helper and recipient. *Journal of Personality and Social Psychology*, 98(2), 222–244. <https://doi.org/10.1037/a0016984>
- Westaby, J. D. (2005). Behavioral reasoning theory: Identifying new linkages underlying intentions and behavior. *Organizational Behavior and Human Decision Processes*, 98(2), 97–120. <https://doi.org/10.1016/j.obhdp.2005.07.003>
- Westaby, J. D., Probst, T. M., & Lee, B. C. (2010). Leadership decision-making: A behavioral reasoning theory analysis. *The Leadership Quarterly*, 21(3), 481–495. <https://doi.org/10.1016/j.leaqua.2010.03.011>
- Yassae, M., & Mettler, T. (2019). Digital occupational health systems: What do employees think about it? *Information Systems Frontiers*, 21(4), 909–924. <https://doi.org/10.1007/s10796-017-9795-6>

Summary Brief

Mapping the Video Game Ecosystem and Leveraging AI for Sales Prediction and Feature Analysis

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Presentations

As the global video game industry continues to expand, surpassing film and music in both revenue and cultural influence, it remains significantly underexplored within the field of marketing research. This gap is especially surprising given that in 2023 alone, the gaming industry contributed \$328.6 billion to the U.S. economy, supported nearly 1.8 million jobs, and generated \$52.7 billion in tax revenues (American Gaming Association, 2023; Grueber & Yetter, 2024). Despite its size, most prior studies related to games have come from education or psychology, while marketing-focused research remains limited (Goh et al., 2023; Marchand & Hennig-Thurau, 2013). In response, our study takes a strategic marketing approach to investigate the structure and sales dynamics of the gaming industry, with three key goals: to develop a conceptual ecosystem map, to identify the best-performing machine learning (ML) model for predicting game sales, and to analyze which factors most significantly drive sales performance.

We begin by constructing a comprehensive ecosystem map of the video game industry that includes developers, publishers, platforms, and consumers. This conceptual framework identifies how information, influence, and value circulate across roles. For marketers, understanding this structure is essential, as each role contributes differently to product development, distribution, and promotional strategies. For example, while developers focus on game design and user experience, publishers handle financing and promotion, and platforms provide technological infrastructure, sales channels, and increasingly, marketing support. The interconnectedness of these roles shapes how value is created, perceived, and exchanged in the market.

Next, we turn to predictive modeling. With a dataset of 16,446 games from VGChartz (spanning 1980 to 2016), we evaluate five ML algorithms: Neural Networks (NN), Random Forest (RF), XGBoost, Decision Tree (DT), and Support Vector Regression (SVR) to forecast North American video game sales. These models incorporate a range of features including platform, genre, publisher, critic score, release year, and sales in other regions. To improve interpretability and reduce model complexity, we recategorized “year of release” into four temporal phases reflecting distinct stages of industry growth: Emergent (pre-1993), Rapid Growth (1993–2001), Peak (2002–2012), and Decline (post-2016). This transformation allowed us to capture nonlinear market shifts aligned with technological generations in gaming hardware and distribution.

Among all models, Neural Networks achieved the highest accuracy with an R^2 of 0.76 and the lowest MSE (0.18), suggesting strong predictive power and generalization capability. Random Forest and XGBoost also performed well, with R^2 values of 0.72 and 0.69 respectively. SVR and Decision Tree showed moderate results, providing useful baselines for comparison. These findings offer valuable insights for practitioners by showing that advanced ML models can provide actionable forecasts, allowing marketing teams to plan product launches, pricing, and promotional efforts more effectively.

After identifying the best-performing model, we conducted a feature importance analysis using permutation importance techniques. We found that international sales, particularly from the EU and Japan, are the most predictive of North American sales, suggesting a strong global convergence in consumer preferences. Publisher identity was also highly influential, reinforcing the role of brand reputation and distribution reach in driving success. Interestingly, the release phase of the game (linked to hardware generations) emerged as a moderate yet meaningful predictor, confirming the marketing relevance of timing in aligning with generational console cycles and seasonal trends.

These results provide strategic implications for marketers in the gaming industry. First, accurate sales predictions can serve as a “marketing compass” to guide investment in advertising, influencer partnerships, and platform negotiations. Second, knowing which features most influence consumer demand allows firms to tailor product design and promotional messages more precisely. Third, the integration of marketing analytics and ML tools into campaign planning processes can improve ROI and reduce risks in product launches.

To summarize, this study makes three contributions to marketing scholarship and practice:

Conceptual Mapping: We provide a structured overview of the video game ecosystem, offering marketers a framework to understand how stakeholder roles and information flows influence market performance.

Predictive Modeling: We apply and compare advanced ML algorithms to identify the most effective model for forecasting North American video game sales.

Strategic Insights: Through feature importance analysis, we identify which factors (e.g., international sales, publisher, release timing) most significantly impact sales outcomes, offering a data-driven foundation for decision-making in marketing strategy.

Our work helps fill a notable gap in the marketing literature by bridging theory and practice through ecosystem analysis and predictive modeling. While our data time length is short, future research could benefit from longer time-series modeling and finer-grained behavioral data to capture evolving consumption patterns. As the industry continues to grow and digital transformation deepens, such integrative and empirical approaches will become increasingly important for understanding and shaping the marketing of interactive entertainment products.

References

- American Gaming Association. (2023, October 9). National economic impact of the U.S. gaming industry 2023. <https://www.americangaming.org/resources/national-economic-impact-of-the-u-s-gaming-industry/>
- Clement, J. (2024). *Video game market revenue worldwide*. Statista. <https://www.statista.com>
- Goh, E., Al-Tabbaa, O., & Khan, Z. (2023). Unravelling the complexity of the Video Game Industry: An integrative framework and future research directions. *Telematics and informatics reports*, 12, 100100. Grueber, M., & Yetter, D. (2024). Video games in the 21st century: 2024 economic impact report.
- Kent, S. L. (2010). *The ultimate history of video games, volume 1: from Pong to Pokemon and Beyond... the story behind the craze that touched our lives and changed the world* (Vol. 1). Crown.
- Marchand, A., & Hennig-Thurau, T. (2013). Value creation in the video game industry: Industry economics, consumer benefits, and research opportunities. *Journal of interactive marketing*, 27(3), 141-157.

Full Paper

Intersection Ahead: The Discussion of Generative AI in Popular Press Versus Scholarly Works

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The release of ChatGPT has significantly impacted the way marketers engage with their current and potential customers. Our study explores how generative artificial intelligence (Gen AI) is discussed in the popular press as well as scholarly articles. Using a systematic approach, we conduct a review of the popular press literature for the first year Gen AI was widely adopted (2023) to identify pros, cons, and use cases, resulting in the four overarching themes of content creation and efficient personalization, operational optimization & data-driven efficiency, customer experience enhancements, and ethical concerns, trust, and regulations. Next, we examine scholarly works through a targeted literature review. Lastly, we synthesize our findings for each of our overarching themes. Overall, our research indicates that while Gen AI is a novel approach to reach customers, the technology needs to be used with caution and care in order to preserve authenticity and minimize fear and skepticism.

Introduction

The release of OpenAI's ChatGPT in November 2022 marked a turning point in public and professional engagement with generative artificial intelligence (Gen AI). By early 2023, ChatGPT had not only captured widespread media attention but had also begun to influence both industry and academia. Given the rapid adoption and evolving discussion surrounding Gen AI, the year 2023 represents a pivotal moment in the technology's adoption and early integration into business practices. Therefore, our study focuses specifically on the first full calendar year following ChatGPT's public launch to examine how Gen AI was framed and discussed. By doing so, it not only allows us to capture a snapshot of how Gen AI was being discussed during a period of heightened visibility and experimentation but also provides a practical window for comparing how scholars and practitioners were interpreting and responding to the same technological phenomenon.

Through a systematic review of popular press articles, we identify emerging themes and tensions surrounding Gen AI's role in marketing. This approach offers valuable insight into how early narratives were shaped, what opportunities and concerns were emphasized, and how these perspectives influenced industry adoption and academic research. Our article proceeds as follows. First, we explain, in detail, our methodological approach. Next, for each of our four overarching themes, we discuss our findings from the popular press, followed by the those of our targeted literature review, and an synthesis between the two. Lastly, we offer managerial implications, limitations, and future research considerations.

Methodology

Choice of Methodology

As a methodology, systematic reviews gained traction in business after Tranfield et al. (2003) examined their transferability and applicability from the medical field to that of business management. While intended for use with scholarly publications, there is nothing inherent in the process to preclude it from being used with other source types. Given that business has always relied upon news publications to keep informed, it is logical to further extend the use of this methodology to a core information category for our field. In part, our research seeks to evaluate how well-suited the systematic review methods and tools are for identifying and selecting popular press articles. Given our goals, we added a librarian to the research team to execute literature searches and provide methodological guidance.

Systematic Review of Popular Press Articles

Covidence. Covidence (2024) is an online application designed to aid researchers in going through the stages of a review—scoping, systematic, meta-analysis. Researchers with an institutional subscription can invite reviewers from outside their organization to participate, making this a valuable collaborative and cross-institutional tool. While Covidence is typically used to winnow down a pool of scholarly articles for further review, we used the software to undertake a similar process on popular press articles. In general, we felt the software worked well for this less

conventional information source and introduced a level of rigor that might otherwise be missing. There were, however, aspects of the software that were less favorable for this purpose; these will be identified and explored after walking through our selection process.

Search Strategy

After identifying twenty general business or marketing-related news publications commonly used in the marketing field, we limited our literature search to ProQuest One Business and EBSCO's Business Source Premier as almost all targeted publications were abstracted and indexed within these two databases. Three key concepts guided our search strategy: the article focused on generative AI, it had a marketing perspective, and it highlighted specific impacts to the end consumer. Using these criteria, a compound search string incorporating synonyms (e.g., customer, consumer, user, etc.) and stemming was crafted.

Results were limited to English-language articles published within newspapers, magazines, and trade journals. While some wire feeds appearing in newspapers were included in our final review, the overall category of wire feeds was excluded from the main search strategy as the team was interested in finding articles that treated the research topic at a more substantial level of discourse.

Given that OpenAI's ChatGPT (model GPT-3.5) launched in November 2022, we opted to look back as far as 2019 to find the earliest possible mentions of generative AI in the popular press. As news coverage was light until February 2023 and we were focused on the introduction and early growth stages of this emerging technology, in practice, our population of popular press articles spanned the calendar year 2023.

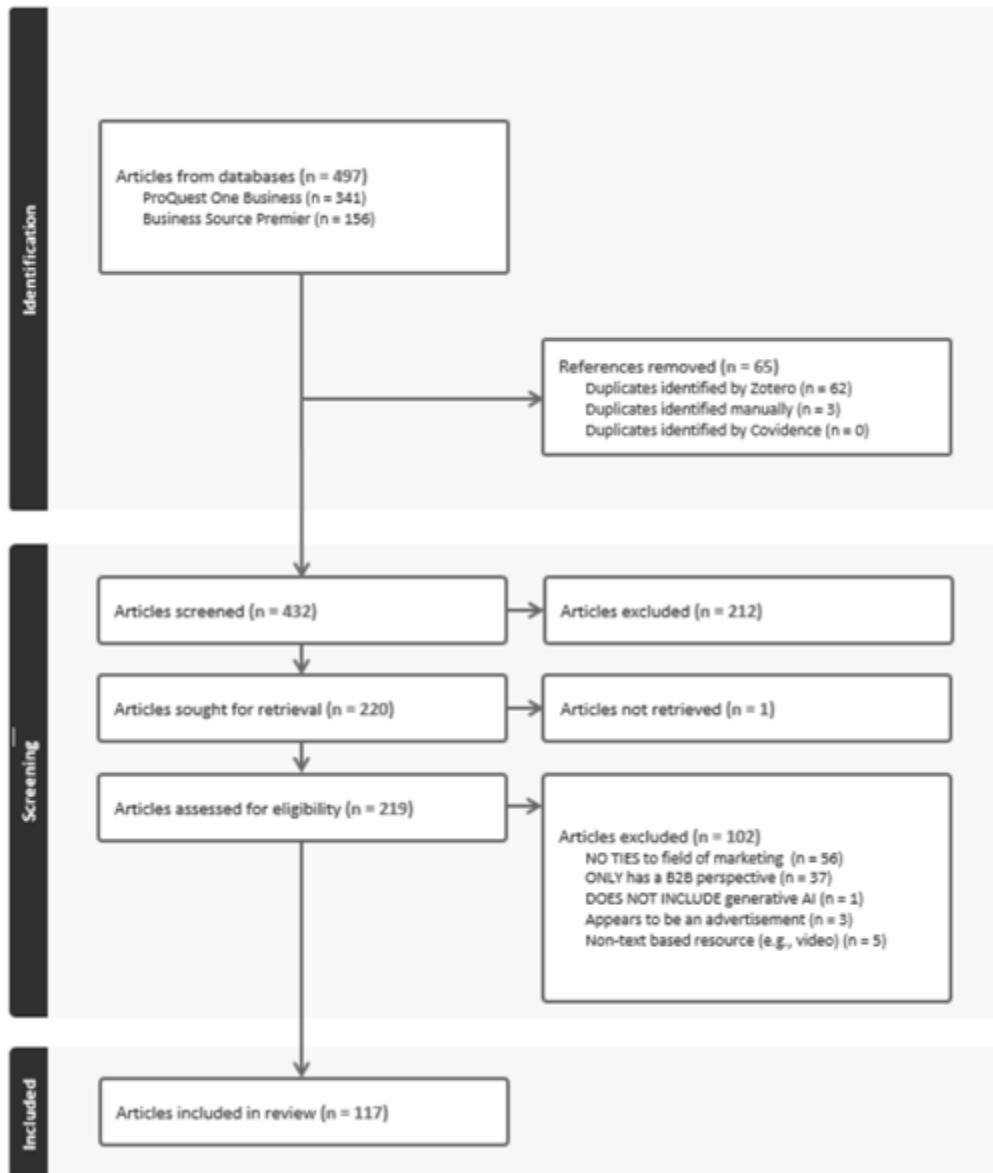
On January 3, 2024, we ran our planned search in Proquest One Business and found 156 articles that met the search criteria. We then ran the search in Business Source Premier where we found 341 articles. Due to overlapping coverage in the two databases, Zotero was used to merge results and remove duplicates. After using a combination of automatic and manual deduplication processes, a pool of 435 unique articles was subjected to the systematic review process described below.

Screening and Full Text Review

At the beginning of 2024, bibliographic information for the 435 popular press articles was uploaded into Covidence. During screening, two team members reviewed the title and abstract of each article to determine whether it met our inclusion criteria. Three articles were found to be duplicates, marked, and removed from review. Articles lacking an abstract were passed through to the full review process. In some cases, the library databases substituted a copy/paste of select text from the article in place of an abstract; lacking the context a true abstract would have provided, we were often forced to pass these on for full text review. In late February 2024, the team met to discuss and collectively resolve screening conflicts. At the completion of screening, 212 articles were judged to be irrelevant and removed from the process.

A full text review of the remaining 220 articles took place from April-June 2024 with two team members assessing each article for eligibility. In addition to the previous criteria, articles were excluded if they were not text-based or if they were more accurately classified as advertisements. One article was removed from the process after reasonable efforts to procure the full text failed. The team again used a group consensus process to address conflicts that remained at the end of the process. Most articles excluded at this stage lacked a marketing context ($n = 56$) or an end user focus ($n=37$). Altogether, 103 articles were excluded, leaving a pool of 117 popular press articles for review and analysis (See Figure 1).

Figure 1: PRISMA matrix from Covidence



Data Extraction

In addition to standardized templates, Covidence allows users to build custom forms for identifying and capturing key data from articles under review. We used this capability to build out a dataset to support our planned thematic analysis. Key fields pulled during extraction included: publication name, business sectors/industries mentioned, evidence provided for claims made, pros and cons of using Gen AI, popular use cases for Gen AI, named Gen AI products, and overall sentiment. As a main focus of our analysis, we established a detailed and structured codebook for tagging articles with specific pros, cons, and use cases to maintain consistent coding and use across team members. While we initially opted for a reviewer and checker for this stage, we also had the pairs meet to resolve more significant conflicts that arose between them. Given the need to develop, test, and apply an original extraction template, the process started in the second half of 2024 was not completed until April 2025. As the systematic review process is performed at an article level and multiple articles appeared in the same publications (e.g., Marketing Dive, McKinsey Insights, etc.), it was necessary to supplement the data extracted via Covidence with additional publication-level data (i.e., country of publication and target audience) to complete the dataset.

Targeted Review of Scholarly Articles

While a full systematic review of the scholarly literature was outside our research scope, we felt it important to explore differences in how the popular press and academia were discussing this same topic. For efficiency, we prioritized the identification of existing systematic and scoping reviews. To allow for a more direct and accurate comparison across the two categories of articles, we used the same databases, search syntax, and date ranges as discussed in the prior section and employed a similar judgement process for ruling articles in or out of scope.

Analysis

In total, 117 popular press articles from 56 publications were included in our final analysis. While articles in the dataset were concentrated in general business publications (n=26) and those geared towards marketing/ advertising (n=18) or business management (n=14), the rest were spread across publications targeted to a broad range of specific industries (e.g., banking/finance, fashion/beauty, communication/media). In reviewing the publication dates of our dataset, we identified that the interest in the topic of Gen AI peaked in the spring of 2023 (four months after ChatGPT's release) with roughly 20 articles per month. However, consistent interest was shown throughout the first year with most months averaging 10 articles.

Each article was analyzed using our detailed, established codebook. We specified ten pros (i.e. content creation, efficacy, error-driven learning, human-like interactions, improved customer experience (CX), increased conversion rate, increased online engagement, operational optimization, product development, synthesize information), twelve cons (i.e. bias, cybersecurity, data privacy, homogeneity, implementation costs, IP risks, lack of regulations, lack of transparency, not accurate/"hallucinations", other ethical concerns, reduce workforce, skepticism), and eleven use cases (i.e. assistance in writing reviews, chatbot, creation of any content, customer service, data analysis, personalized content for customers, portfolio management, reduction in employee workload, sentiment analysis, search engine optimization, social listening). In the event any article contained a pro, con, and/or use case that did not fall under a pre-select category, the researcher noted the topic under a "other" category. While seldom occurring, identified topics not in our codebook include the pro of job creation, the con of customer alienation, and the use cases of training and writing software code (See Table 1).

Four overarching themes of Gen AI appeared in our analysis review, namely, content creation and efficient personalization, operational optimization and data-driven efficiency, customer experience enhancements, and ethical concerns, trust, and regulations. To compare popular press articles to scholarly works, we conducted a targeted literature review focusing on systematic reviews published in or before 2023 containing information on any of the four previously identified themes. For each theme, we discuss our findings from the popular pieces and targeted literature review followed by synthesization.

Table 1: Pros, Cons, and Use Cases Identified in Popular Press Articles

Pros	Number of Articles Containing Topic
Content Creation	97
Efficacy	5
Error-driven learning	12
Human-like interactions	45
Improved customer experience(CX)	75
Increased conversion rate	38
Increased online engagement	38
Operational Optimization	8
Product development	23
Synthesize information	39
Cons	Number of Articles Containing Topic
Bias	2
Cybersecurity	14

Data privacy	27
Homogeneity	6
Implementation costs	13
IP risks	18
Lack of regulations/laws	21
Lack of transparency	23
Not accurate/"Hallucinations"	49
Other ethical concerns	16
Reduce workforce	22
Skepticism	30
Use Cases	Number of Articles Containing Topic
Assist in writing reviews	3
Chatbot	48
Create	88
Customer service-26	56
Data analysis	56
Personalized content for customers	8
Portfolio management	5
Reduction in employee workload	5
Sentiment analysis	12
SEO	16
Social listening	5

Content Creation and Efficient Personalization

Popular Press Analysis. One prominent theme that emerged from our analysis is the use of Gen AI for content creation and efficient personalization. This theme captures how companies in the articles we evaluated describe Gen AI's ability to rapidly generate tailored content for diverse audiences in an efficient manner. The integration of Gen AI tools, such as ChatGPT and Claude, into the marketing or sales function has transformed how businesses communicate their products and services to current and prospective customers. Using Gen AI, marketing and sales departments can now effectively create and customize content at scale, giving them the ability to develop relevant, personalized marketing or sales messages at the individual customer level with ease. The more closely content aligns with an individual's interests or needs, the more likely it is to capture their attention and foster engagement (Hunter, 2023). Personalization enhances relevance, which in turn increases the effectiveness of these efforts.

In content creation, Gen AI tools can also assist marketing and sales professionals with tasks such as writing blog posts, social media captions, email subject lines, and prospecting scripts and talking points. These tools analyze large datasets, including company data and publicly available market research on customer behaviors, to recommend or autonomously write content aligned with established brand standards. "This rapid content-generating process guarantees a steady stream of interesting information across several platforms, keeping an active online presence" (Sinha, 2023). Additionally, Gen AI tools can quickly produce multiple variations of the same content, enabling marketers to test different formats, tones, or messages. This makes it easier to identify which versions perform best, whether in terms of engagement, conversions, or other key metrics, and helps refine future content marketing strategies accordingly. (Pophal, 2023).

Beyond content creation, Gen AI plays a crucial role in scaling personalization. Traditional segmentation methods, which rely on broad demographic or psychographic criteria, are increasingly being replaced by AI-driven

tools. These systems analyze publicly available, rich textual data combined with internal company data, such as a customer's purchase history or prior website visits, to create individualized content (Jenner, 2023). This enables companies to deliver dynamic web pages, personalized email campaigns, and product recommendations that adjust in real time based on user interaction (Jain, 2023).

The results of our thematic analysis of industry related articles suggest that Gen AI not only enhances operational efficiency but also elevates strategic decision-making. The articles we reviewed suggest that Gen AI tools allow for a deeper understanding of customer preferences, which in turn informs broader marketing and sales strategies. However, our search results also identify concern over the potential loss of brand authenticity and creative control when heavily relying on algorithmically generated content.

The ability to personalize content at scale, once a time-intensive activity, can now be done using Gen AI tools in a much more efficient manner. This shift empowers businesses to move from mass communication methods, such as TV ads or radio spots, to individualized engagement without sacrificing speed or scale. As Gen AI technologies continue to evolve, the balance between automation and human creativity will remain a central consideration in content marketing strategy (Adams, 2023d).

Targeted Literature Review

Our targeted literature review identified a shift in marketing scholarship on Gen AI. Early during the Gen AI revolution, researchers quickly moved away from simply defining and classifying what constitutes Gen AI, to a broader exploration of Gen AI's strategic role in content creation. A body of literature emerged that examined the broader ethical and organizational implications of using Gen AI in content creation. Seminal research was published on evaluating the practical capabilities of these Gen AI tools to augment or transform tasks such as campaign design (Chintalapati & Pandey, 2022), market segmentation (Mariani et al., 2022), and customer service automation (Fares et al., 2022). This focus reflects a broader shift toward understanding how Gen AI can be integrated into corporate marketing and sales workflows and decision-making processes, and how its use might reshape consumer perceptions and campaign performance (He & Zhang, 2023).

At the same time, researchers showed increasing concern over the risks posed by adopting Gen AI. Key issues included bias in model outputs, the potential for hallucinations, and copyright infringement. These concerns often served as the foundation for calls for better regulation, greater transparency in model development, and more emphasis on the ethical use of Gen AI technologies (Mehmood, et al., 2023).

Overall, the academic literature we studied presented Gen AI as both a technological breakthrough from a content creation point-of-view and a source of substantial uncertainty. Researchers must keep pace with Gen AI's rapid development while dealing with fundamental questions about its role in society and the antecedents and frameworks needed to study it.

Synthesis

From a content creation perspective, the popular press and academic research we studied took different approaches when discussing Gen AI. In the popular press articles the tone was generally upbeat and forward-looking. Articles tended to focus on what the technology could do, like writing blog posts, generating ads, or creating images, and how quickly it could complete these tasks. Popular press often featured examples of companies or brands using Gen AI in their marketing or advertising and some going as far as suggesting that Gen AI might lead to some employees losing their jobs. "Employees may be apprehensive about adopting new technologies, fearing job displacement or uncertainty about how AI will impact their roles" (Agarwal, 2023).

Academic research, by contrast, approached the topic with more rigor. Marketing scholars were less interested in the speed and novelty at which Gen AI can create content and were more focused on the implications, limitations, and other factors involved in content creation. Rather than seeing Gen AI as a replacement for human creators, most academic research viewed Gen AI as a collaborative tool (Mehmood et al., 2023). Ethical considerations were also a bigger focus in academic studies. Researchers raised concerns about transparency (Mariani et al., 2022), bias in generated content (Caner & Bhatti, 2020), and questions around ownership and copyright (Chintalapati & Pandey, 2022), issues that were often only briefly mentioned in media coverage, if at all.

Overall, while the popular press tended to focus on possibilities and quick wins that could be gained in industry after adopting Gen AI tools, academic research took a longer view, trying to understand what Gen AI might mean for the future of marketing and sales and how it fits into existing theories and practices.

Operational Optimization & Data-Driven Efficiency

Popular Press Analysis

Another key theme that emerged from our analysis is the emphasis on operational optimization and data-driven efficiency. This theme highlights how Gen AI is increasingly seen in industry as a driver of operational efficiency, enabling companies to streamline internal processes and reduce manual workload. By leveraging data-driven insights, these tools support faster, more informed decision-making and help individuals and teams operate with greater precision and agility (Zinkula, 2023).

In marketing and sales departments, Gen AI-powered tools are frequently used to automate repetitive and time-intensive tasks such as media buying, budget allocation, and performance tracking. These systems analyze historical and live data to predict sales outcomes and can optimize ad-spend across channels. For example, machine learning algorithms can use predictive analytics to dynamically adjust bidding strategies in programmatic advertising based on shifting marketing conditions, ensuring that budget is directed toward the most effective ads in real-time. “Nykaa Fashion successfully enhanced customer engagement by implementing Gen AI-driven strategies, resulting in a remarkable 50% increase in revenue” (Jain, 2023).

Gen AI also facilitates operational efficiency through enhanced demand forecasting and inventory management. Particularly in omnichannel retail and e-commerce settings, Gen AI systems analyze data from sales trends and seasonal patterns to anticipate future demand with greater precision. These predictions help marketing and operations teams align promotional strategies with supply chain constraints, which minimize overstock and stockouts while improving customer satisfaction (Gleason-Allured, 2023).

Findings from our thematic analysis of industry literature also highlight how Gen AI enhances cross-functional coordination. Gen AI is described as being able to provide real-time insights, enabling quicker response to market shifts and customer feedback. Many articles we reviewed noted that Gen AI driven analytics dashboards reduce the burden of manual reporting and empower more agile decision-making.

However, the adoption of Gen AI within the marketing function is not without challenges. Several articles emphasized the need for high-quality data inputs and expressed concern about the potential for algorithmic bias or non-transparent decision-making. There is also a learning curve associated with integrating Gen AI systems, requiring both technical infrastructure investment and a willingness within the company to change current procedures.

Overall, Gen AI contributes significantly to operational optimization by transforming how data is interpreted and acted upon. As more marketing and sales teams go digital, Gen AI is playing a bigger role in helping them work faster, stay flexible, and make smarter decisions based on data. It is quickly becoming a key tool for boosting both efficiency and impact (Land, 2023).

Targeted Literature Review. From an operational optimization and data-driven efficiency perspective, initial academic research on Gen AI focused on how the technology was integrated into existing business processes and evaluated for its potential to enhance organizational performance. Rather than treating Gen AI tools as a one-size-fits-all solution, scholars examined how Gen AI fit into existing business processes and how it impacted existing workflows (Chintalapati & Pandey, 2022; Schiessl et al., 2022). Much of the research we reviewed explored not just what Gen AI could automate, but what value it added to a company or organization and under what conditions that value was realized.

Marketing scholars studied how Gen AI improved marketing and sales operations by reducing content production time (Hollebeek et al., 2024), enhancing ad personalization at scale (Sidlauskiene, 2022), or assisting in customer service automation (Riedel & Mulcahy, 2022). But rather than assuming these improvements always led to better performance, academic literature emphasized the importance of human-AI collaboration, oversight, and alignment with strategic goals (Caner & Bhatti, 2020). Scholars also raised questions about data quality and bias (Mehmood et al., 2023).

Another area of focus when Gen AI was initially being adopted were the metrics used to evaluate efficiency. Academic research tended to go beyond surface-level measures like speed or cost reduction and instead examined broader indicators such as customer satisfaction and brand consistency (Fares et al., 2023). There was also growing attention to the operational risks of adopting Gen AI too quickly, including the potential for errors and disruptions to established decision-making processes (Caner & Bhatti, 2020).

In short, the research we reviewed treated Gen AI not simply as a tool for optimization, but as a complex organizational resource that must be implemented thoughtfully, and constantly evaluated, to ensure it positively contributes to a company's bottom line.

Synthesis

The popular press and academic research tended to focus on different aspects of Gen AI when discussing operational optimization and data-driven efficiency. In the popular press, coverage often highlighted speed, and the cost savings companies gained when using Gen AI tools. Articles typically emphasized how Gen AI can streamline repetitive tasks, reducing the need for human labor. These news reports and industry trade journal articles tended to frame Gen AI as a quick-to-implement solution for improving business efficiency, with headlines that suggested entire departments, from customer service to content production, can be automated with minimal oversight (Arora, 2023). The framing was largely tool-centric, focusing on what companies can adopt immediately to become faster or more productive.

Academic research, however, took a more analytical and systems-oriented approach. Marketing scholars were less interested in individual Gen AI tools and more concerned with how Gen AI integrated into broader organizational processes and decision-making (He & Zhang, 2023). Instead of assuming that automation leads to better outcomes, much of the academic literature we studied explored when and how Gen AI actually improves operational efficiency, and under what conditions it might create new risks or inefficiencies (Caner & Shatti, 2020).

In short, the popular press tended to focus on the immediate benefits, often without much scrutiny on possible downstream effects. Scholarly work, by contrast, was more cautious, digging into the complexity of implementation and the hidden costs that come with adopting Gen AI too quickly or without proper governance (Hollebeek et al., 2024).

Customer Experience (CX) Enhancement

Popular Press Analysis

Through our research we found a common theme in the way popular press has noted how Generative AI has dramatically enhanced customer experience through increased personalization, efficiency, and engagement. One application, Gen AI chatbots, is assisting companies to provide faster and better customer service. The use of AI chatbots to handle inquiries is nothing new with customers often finding them frustrating so much so that 77% of respondents of an Ipsos poll preferred interacting with a human service agent (Berthiaume, 2023). However, Gen AI chatbots use natural language processing and can handle complex inquiries, regardless of language, unlike traditional chatbots. For example, a Capterra study found that “67 percent of ChatGPT users feel understood by the bot often or always, compared to just 25 percent of traditional chatbot users. And, only 19 percent of ChatGPT users have had to reword or simplify their queries to be understood, compared to 49 percent of traditional chatbot users” (Online, 2023). As a result, customers experience a more human-like interaction and can be guided through the customer journey in a more personalized manner (How gen AI, 2023).

A second application of Gen AI we found mentioned when researching was customer engagement. Companies are constantly trying to engage with their customers in more impactful and meaningful ways. One way is providing messaging across various touchpoints and platforms- website, social media, or emails- consistently. For instance, a company's Gen AI system could remember questions the customer previously asked, send follow-up emails and reminders, and recognize a decline in engagement and offer incentives to re-engage. Additionally, Gen AI can further engage the customers by allowing them “a more active role in brand narratives” (Acar, 2023). Whether it is designing campaigns, creating images, and sharing their creations with others, as demonstrated by Coca-Cola's “Create Real Magic” initiative (Kelly, 2023) or interacting with content for loyalty rewards, as seen through Smoothie King's gamification of a ChatGPT-written romance novel (Adams, 2023b), Gen AI allows customers to engage with brands in new and exciting ways.

Lastly, our research indicates the potential Gen AI has concerning sentiment analysis. Through Gen AI tools, companies can gather and analyze customers' feelings via real-time data from online sources including customer reviews, social media posts, comments on third-party websites, and chat forums (Agarwal, 2023). For example, companies in the beauty and cosmetic category are leaning into Gen AI's sentiment analysis capabilities. Due to their industry facing fast-paced changes in trends, thanks in part to TikTok viral videos, having up-to-date data on sentiment allows companies to keep up with these changes, produce appealing content, and direct R&D efforts (Adams, 2023c). Moreover, insights gained by sentiment analysis can be incorporated into other Gen AI activities, such as the creation of personalized content and recommendations, further increasing interest and engagement (Sinha, 2023).

Targeted Literature Review

In our targeted literature review, we found customer experience enhancement was mentioned under two topics. The first is chatbots and their continuous improvements to have more human-like interactions with customers. In a systematic review focusing on co-creation, Kaartemo & Helkkula (2018) discuss the ways AI can assist in the integration between service providers and consumers. Through learning of the needs, wants, and preferences of customers, chatbots can create more personalized interactions. However, Kaartemo & Helkkula (2018) explains that the articles within their review indicate that individuals have different expectations when they knowingly interact with chatbots, thus altering their behavior in such encounters, particularly in a service failure context.

These sentiments are echoed by He & Zhang (2023) in their systematic review of AI-power touch points. The authors found chatbot interactions, functioning as the main touchpoints for consumers in the post-purchase stage, are affected by multiple factors. First, a chatbot's appearance (i.e., human-like) and interactive (i.e., anthropomorphic role) characteristics can impact satisfaction, company evaluations, and consumption. Second, the consumer's characteristics, such as attachment styles, psychological needs, and anxiety affect behavior towards chatbots. Third, the consumer's perceptions of the chatbots' capabilities and role (i.e. friend/foe, master/servant) can influence the willingness to interact with the technology. Lastly, factors such as social influence, the characteristics of the company itself, and world events can affect the consumer's view of the applicableness of chatbots.

As Kim et al. (2023) explained in their review of AI in marketing and consumer behavior research, the number of papers within the marketing field that focus solely on chatbot AI interactions is limited. This may be due to chatbots being part of a broader category of AI agents, which include robots, autonomous products, voice assistances, and algorithms, such as statistical models (Kim et al., 2023). Therefore, this lends an explanation to why our targeted literature review procedure produced only a handful of results for our timeframe as we directed our search for chatbots and not all AI agents.

The second topic that emerged concerning customer experience enhancement was customer engagement. In a network analysis of AI in marketing articles, Schiessl et al. (2022) found that engagement is the predominant outcome of AI-usage. This finding is substantiated through Bansal et al.'s (2023) systematic review on understanding the role AI plays in customer engagement. After examining 23 papers published between 2019-2022, the authors found chatbots are "used by various sectors like banks and e-commerce companies for crisis management, mental health, consulting with a doctor, in hospitality & tourism as a means of communications as it saves time and makes ease for customers' queries and helps various organizations to promote engagement with customers" (p. 7). Additionally, the authors state voice assistants, online outlets, and AI-image analysis help in engaging customers. Within the social media realm, AI-influencers, known as virtual influencers (VI), are gaining traction in increasing customer engagement (Laszkiewicz & Kalinska-Kula, 2023). With consumers' increased interaction with online platforms, coupled with companies' constant need for new content, VIs are being turned to as an alternative to human influencers. Despite the fact VIs are unable to test products, through their systematic review, Laszkiewicz & Kalinska-Kula (2023) demonstrate the effectiveness VIs have on increasing consumer engagement by producing exciting and attractive content.

Synthesis

Customer experience enhancements were discussed in similar ways between our popular press and scholarly articles. The topic in popular press articles was covered via chatbots, customer engagement, and sentiment analysis. These three areas gave a broader view of the capabilities Gen AI has concerning customer experience. Our targeted literature review resulted in two topics, chatbots and customer engagement. When it comes to chatbots, there was alignment between the two types of articles. Both discussed the human-like interactions and personalization the

technology can offer to consumers. This indicates that authors from both recognize the impact and influence chatbots can have on behaviors.

An area of difference between the popular press and scholarly articles on chatbots is the way in which the technology was defined. As described by Kim et al. (2023), chatbots fall into the larger category of AI agents which include robots, voice assistants, and algorithms. Yet, in the popular press, the authors tended to group AI agents under the chatbot term with some making the distinction between new technology chatbots and “traditional” chatbots (Online, 2023). This difference between the two types of articles may be due to the intended audience, level of nuance expected, or word count limits. Popular press articles are geared towards the general public and seldom have the opportunity for word counts in the thousands, whereas scholarly articles are written for those with advanced degrees and lend themselves to be more in-depth and research based. Another difference between the popular press and scholarly articles is the quantity of information. Within our popular press systematic review, the use case of chatbots was found in 48 articles, the second highest amongst all categories, while our targeted literature review produced far less. As Kim et al. (2023) indicated, there is a significant lack of papers focused on chatbot AI interactions within the marketing discipline so the number of articles we found is to be expected. Recent systematic reviews (i.e., published 2024 or later) could provide more fruitful results as they may include more papers containing data captured since the release of ChatGPT.

Concerning customer engagement, our review produced similar findings between the popular press and scholarly articles. Companies are turning to AI to increase engagement with their brands. While the popular press articles provided more specific examples, both types of articles highlighted the importance and growing reliance on AI to enhance the experiences customers have with brands. Customers have an abundance of choices when it comes to where they invest their time and money so companies need customers to engage with their brand over others. Whether it is through interacting with virtual influencers and AI-agents across touch points, creating and sharing images, or allowing more direct input into brand narratives, Gen AI enables companies to engage current and potential customers in novel and, hopefully, lasting ways.

Ethical Concerns, Trust, and Regulation

Popular Press Analysis

Despite the numerous benefits Generative AI can provide companies, there are risks involved. Based on our research, we found three main categories of concern, namely, mistrust in the technology, lack of regulations, and ethicality. In our review of popular press, confabulation was discussed more than any other risk of Gen AI. When companies implement Gen AI functions, the expectation is the tool will provide accurate information. Unfortunately, this is not always the case as it has been shown that Gen AI can produce inaccurate information, better known as “hallucinating.” While some inaccuracies may be viewed as innocent, producing false or biased information can lead to serious consequences. Imagine a financial company producing personalized product recommendations for clients, an entrepreneur making company decisions, or an organization’s automatically generating social media posts, all based on Gen AI output which may not be 100% reliable. Therefore, any Generative AI tool should be continuously monitored “to provide safeguards and review and revise the automated marketing outputs that generative AI provides. By providing human oversight of the technology’s output, companies can greatly limit bias risks and inaccuracies” (Britt, 2023).

Furthering the mistrust in Gen AI is the lack of transparency and regulations. A survey conducted by Dentsu, an international integrative marketing agency, found “over two-thirds (70%) of respondents said brands should disclose when AI has been used to develop products, services, experiences and content” (Adams, 2023a). Though customers may have recognized they were interacting with a AI tool in the past (i.e., chatbot), the more advanced, human-like interactions of today’s Gen AI chatbots can be harder to decipher. Companies run the risk of losing trust if a customer, believing they are speaking to a human service agent only, finds out it was AI all along. While California, for example, has a chatbot law which “mandates that in certain consumer interactions, organizations must disclose clearly and conspicuously that a consumer is communicating with a bot” (Gartner, 2023), most states do not, leaving customers to question who or what they are interacting with. Due to our data collection process gathering popular press pieces written in 2023 from both domestic and international sources, we saw how the lack of regulation is an issue far beyond the borders of the United States. As with any advancement, it takes time to fully grasp the magnitude and identify areas of improvement. However, numerous articles suggest that regulations need to be set in place to protect the consumer and business alike (i.e., ASCI, 2023; Nott, 2023; Schuman, 2023; Singh, 2023). An article published in July 2023 by Computer Weekly gave some insight into how countries were handling the new technology

by stating “policymakers in the European Union are drafting regulations around the use of AI, with Italy’s privacy and data protection regulator even banning OpenAI’s ChatGPT in early April over privacy concerns before reversing the decision later in the month” (Tan, 2023). While, understandably, the articles in our data set lack specific recommendations to improving regulation due to the novelty of the technology, the call for increased regulations was seen across publications in various industries including banking (Sinnock, 2023), business management (Deveau, 2023; Groves et al., 2023; Harreis et al., 2023), communication and media (Krefetz, 2023; Schuman, 2023), fashion (Lee, 2023; Talwar, 2023), and pharmaceuticals (Jenner, 2023).

Though mistrust and lack of regulatory laws were prevalent, a variety of ethical issues appeared in the popular press pieces. One such issue is that of bias embedded into the A.I. software itself. Programmers may unknowingly insert their personal bias into their work. To combat bias, John Yang, VP for Asia-Pacific and Japan at Progress, states “If an organization wants to be serious about addressing data bias, it needs to bring a more diverse group of people together, train them on dataset selections and management, and set up a process to do regular reviews to make sure the issue is top of mind” (Tan, 2023, p.17). After all, exposure and recognition of bias can plant the seeds of mistrust and skepticism in the consumer’s mind. Another ethical issue that can lead consumers to be wary is cybersecurity. While cyber attacks are not new, Gen AI can make brands susceptible to prompt injection attacks conducted by hackers which “can trick chatbots into revealing sensitive data or generating deceptive content” (Acar, 2023, p.8), such as malware or phishing sites, easily confusing consumers (Gartner, 2023).

A third ethical issue that appeared deals with IP risks. Gen AI systems, particularly ChatGPT, are trained with a vast amount of online information and very likely include copyrighted content. As a result, Gen AI output could possibly violate IP protections and those using the content could face penalties. (Gartner, 2023). However, as the article “Real or fake? The IP risks of ‘synthetic’ media” states, “it is unlikely that such users will know if copyrighted content is reproduced in the AI’s output and in what proportion, which makes it particularly difficult to quantify the underlying risk” (2023, p.2). The article goes further and explains that user who use Gen AI to “manipulate existing content to create synthetic media need to be aware that the content they input into generative AI models can be incorporated into the system’s training data. This presents a risk of putting their own valuable IP or confidential information into the public domain” (p. 2-3). Google, OpenAI, and Getty Images, even in 2023 when ChatGPT was still relatively new, recognized the IP issues and proceeded to address the concern with new tools and indemnification policies (Acar, 2023).

Targeted Literature Review

Our targeted literature review indicates that ethicality has been, is now, and most likely will remain an important topic concerning the use of AI. Privacy, data protection, inaccurate information, and more are all areas of concern. Sidlauskiene (2022) examines Intelligent Agents (IAs), which are “virtual assistances that help with information search and acquisition, collaborative filtering, personalization, recommendation, price comparison, customer data analysis, proactive engagement with customers, cross-selling, and interactive knowledge sharing in online marketplaces” (p.438). Though discussion of the ethical perspective of IA use is lacking, the author indicates consumers may resist IAs due to ongoing and new ethical issues. Consumers could be wary of information provided by IAs being inaccurate or inadvertently revealing customer personal data, especially when used in highly sensitive matters.

Bias in data and algorithms was another area of concern. Caner and Bhatti (2020) describe that bias in training data can result in decisions causing “undesirable circumstances like unfair recruiting decisions, misled scientific or medical prognoses, or distorted loan and legal decisions” (p.185). Therefore, management involvement is crucial in overseeing AI-based decisions are accurate and ethical. While the enacting of regulations and laws to protect consumers is slow due to the rapid evolution of AI technology, changes are coming. Mehmood et al. (2023) explain how new legal frameworks, such as India’s Personal Data Protection Bill, California Consumer Privacy Act, Europe’s General Data Protection Regulation, limit the collection and use of consumer information. In turn, these limitations may not only impact the success of company’s personalization efforts, but their willingness in the first place to undertake such initiatives. Mehmood et al. states these legal changes warrants researchers’ urgent attention “to develop an understanding of how organizations would be able to learn about consumer preferences as a result of different legal bindings in different regions of the world, and how this will impact consumer and firm outcomes accordingly” (p. 29).

Ethical issues, while incredibly important, seemed to be glossed over by many articles in our targeted literature review. Despite having only a handful of articles, those that did discuss ethical concerns at length

demonstrated why this topic is vitally important. AI and its rapid evolution pose significant ethical challenges to companies. In times of data breaches, biased information, and inaccurate results, consumers' trust in the technology can wane. Legal entities have begun to set forth new legislation to protect consumers' interest, changing the way firms conduct marketing. Our review shows that not only would companies benefit from enacting their own ethical guidelines and enhancing managerial oversight, but also researchers should give increased attention to helping organization understand ways to be compliant with new regulations while continuing reaching their consumers.

Synthesis

Ethical issues appeared as a concern in both the popular press and scholarly articles. While each discussed the topics of bias, privacy, and regulations, the popular press articles focused more heavily on the mistrust of AI due to a lack of transparency. Consumers desire to know if and when they are interacting with AI as the technology is ever increasing to behave more human-like and can make it difficult to differentiate between human and machine. When the realization sets in that they were speaking to an AI-agent from the beginning, mistrust of the company and AI technology can rise, thus potentially damaging loyalty and impacting future interactions. The scholarly articles we read failed to cover how detrimental a lack of transparency can be on a company.

Another area only mentioned in our popular press articles was IP risks. Large learning models train on available data which can potentially contain copyrighted material including written works, images and music. Though the scholarly articles discuss biased-laden data training sets, the topic of copyrighted information was not examined. This may be, in part, due to the scholarly articles being systematic reviews containing some works published prior to the release of ChatGPT in 2022. Just by their nature, popular press articles are timelier and can reflect the rapid evolution of AI in real-time. While IP risks may have been an issue prior to ChatGPT, the months following its release made the topic more prevalent.

Despite the differences, both the popular press and scholarly articles imbued the importance of using AI technology ethically. At the heart of marketing are the consumers who put their trust in companies. Consumers who are wary of a company's approach because of AI will seek alternatives, a situation organizations want to avoid. Therefore, it is vital that organizations and researchers alike understand how best to obtain and retain customers using AI initiatives that build trust, increase engagement, and produce outcomes ethically.

Discussion

Our study explored how Gen AI is studied and discussed in both academic literature and the popular press, with a specific focus on its use in marketing and sales. Through a thematic analysis of industry related publications and a targeted literature review of academic articles, we identified four key themes: content creation and efficient personalization, operational optimization and data-driven efficiency, customer experience enhancement, and ethical concerns, trust, and regulation. These themes reveal both convergence and divergence in how Gen AI is discussed and studied across scholarly and industry-oriented sources.

Popular press articles tended to emphasize the practical, immediate benefits of Gen AI such as speed, scalability, and cost savings often highlighting specific tools and use cases. In contrast, academic literature approached Gen AI with greater caution and complexity, focusing on long-term implications and ethical considerations. This divergence reflects differing priorities: while industry tends to be driven by innovation and competitive advantage, academic research is more likely to study the assumptions and consequences of rapid technological adoption.

Thematically, both practitioners and scholars acknowledged Gen AI's transformative potential in marketing and sales, particularly in content generation and personalization. However, the popular press framed these capabilities as largely plug-and-play, whereas academics emphasized the importance of human oversight and data quality. Similarly, while both areas recognized Gen AI's role in operational efficiency, academic literature was more likely to question the sustainability and governance of such implementations.

Managerial Implications and Limitations

For marketing and sales professionals, our study offers several actionable insights. First, while Gen AI tools can significantly enhance business processes, companies should be cautious about over-reliance on automation. Maintaining brand authenticity, creative control, and human-to-human interactions remain essential, especially as consumers become more aware of Gen AI. Second, the integration of Gen AI into marketing and sales operations should be guided by clear strategic objectives and supported by robust ethical practices. This includes ensuring

monitoring for bias and aligning the content being produced by AI with brand values and customer expectations. Third, the findings suggest that Gen AI can improve cross-functional collaboration and decision-making by providing real-time insights and reducing manual reporting burdens. However, realizing these benefits requires investment in infrastructure and training. Companies should also be aware of the regulatory landscape and ethical risks associated with Gen AI, including transparency, data privacy, and intellectual property concerns.

This study is not without limitations. First, our analysis was limited to articles published in 2023, a deliberate decision made to capture a focused snapshot of Gen AI discourse during a pivotal year of adoption and public interest. While this approach allowed for consistency and depth, it excludes more recent developments and evolving perspectives. Second, our reliance on English-language sources and specific databases may have introduced geographic or publication bias. Future research could expand the temporal and linguistic scope, incorporate additional media formats (e.g., podcasts, videos), or explore how Gen AI discourse varies across industries or cultural contexts. Also, we recommend future researchers account for the time it takes scholarly articles to be published and expand their parameters in order to capture data collected in their desired timeframe.

Lastly, though we generally had a favorable opinion of Covidence, there were several areas where the tool did not work as well for a pool of non-scholarly articles and thus, created limitations. First, due to the shortened nature of many popular press articles, a significant number of sources did not have a true abstract or were missing one altogether, which limited our ability to adequately evaluate them during the screening stage. While it seems unlikely that this would be a significant issue for scholarly articles, future research using popular press articles will need to allot extra time during full text review. Additionally, while Covidence includes functionality to capture key data from an article using its data extraction forms, it does not allow you to highlight/tag where in the articles the extracted data was located. As concepts in our underlying articles were not always articulated with clear and consistent terminology, a lot of time was spent determining where pros, cons, and use cases were present in the underlying data when it came to resolving extraction conflicts. While this issue persisted throughout the three stages of the systematic review, it was most prevalent during extraction. Future researchers who choose to customize the data extraction template and/or are working with less structured articles would be wise to take external notes.

Conclusion

This research contributes to the growing body of work examining the role of Gen AI in marketing by systematically comparing how the technology is discussed in academic and popular press sources. Our findings reveal a dynamic and evolving conversation, shaped by both enthusiasm and skepticism. While the popular press tends to highlight Gen AI's immediate utility and success stories, academic literature offers a more nuanced view that considers long-term implications, ethical challenges, and organizational complexity.

By juxtaposing these perspectives, we provide a more holistic understanding of how Gen AI is being positioned within the marketing landscape. As the technology continues to evolve, it will be critical for both scholars and practitioners to engage in ongoing dialogue, ensuring that innovation is balanced with responsibility, and that the promises of Gen AI are realized in ways that are both effective and ethical.

Remarks

Authors contributed equally to this paper and are listed in alphabetical order.

For reference list of all papers used in the popular press review as well as corresponding tables, please view <https://doi.org/10.35099/3qba-d047>

References

Acar, O. A. (2023, December 11). A practical guide for marketers who want to use Gen AI. Harvard Business Review Digital Articles, 1-11.

Adams, P. (2023a, April 3). As generative AI hype hits full steam, consumers carry reservations. Marketing Dive.

Adams, P. (2023b, May 25). Smoothie King pens paperback romance novel with aid of ChatGPT. Marketing Dive.

Adams, P. (2023c, August 29). Estée Lauder bets generative AI can keep pace with shifting consumer tastes.

Marketing Dive.

Adams, P. (2023d, December 18). Gartner: 20% of brands to go 'acoustic' amid rising generative AI concerns. Marketing Dive.

Agarwal, U. (2023, July 23). Beyond personalisation: Generative AI's revolution in customer engagement for marketers. Financial Express.

Arora, H. (2023, May 10). Generative AI: game changer in the ad industry. afaqs!

ASCI and Khaitan & co release whitepaper on generative AI in advertising: Assessing opportunities, risks, and compliance. (2023, August 1). afaqs!

Bansal, R., Saini, S., & Pruthi, N. (2023). Promoting Customer Engagement through Artificial Intelligence-A Systematic Literature Review. *Academy of Marketing Studies Journal*, 27(S5).
<https://www.abacademies.org/articles/promoting-customer-engagement-through-artificial-intelligencea-systematic-literature-review-15855.html>

Berthiaume, D. (2023, March/April). ChatGPT: What it means for retail companies. *Chain Store Age*, 99(2), 39.

Britt, P. (2023, September). Marketers need generative AI guardrails. *Customer Relationship Management*, 27(7), 14.

Caner, S., & Bhatti, F. (2020). A Conceptual Framework on Defining Businesses Strategy for Artificial Intelligence.

Contemporary Management Research, 16(3), 175–205. <https://doi.org/10.7903/cmr.19970>

Chintalapati Srikrishna, & Pandey, S. K. (2022). Artificial intelligence in marketing: A systematic literature review: The Journal of the Market Research Society. *International Journal of Market Research*, 64(1), 38–68.
<https://doi.org/10.1177/14707853211018428>

Covidence systematic review software, Veritas Health Innovation, Melbourne, Australia. Available at www.covidence.org.

Deveau, R., Griffin, S. J., & Reis, S. (2023, May 11). AI-powered marketing and sales reach new heights with generative AI. McKinsey Insights.

Fares, O. H., Butt, I., & Lee, S. H. M. (2023). Utilization of artificial intelligence in the banking sector: A systematic literature review. *Journal of Financial Services Marketing*, 28(4), 835–852. <https://doi.org/10.1057/s41264-022-00176-7>

Gartner identifies six ChatGPT risks. (2023, May). Communications Today.

Gleason-Allured, J. (2023, June). BeautyGPT. *Global Cosmetic Industry*, 191(6), 6.

Groves, R., Harkness, L., Heitz, J.-C., Kostring, J., Reis, S., & Treasure, W. (2023, September 12). Tech-powered growth: Three things growth leaders do differently. McKinsey Insights.

Harreis, H., Koullias, T., Te, K., & Roberts, R. (2023, March 8). Generative AI: Unlocking the future of fashion. McKinsey Insights.

He, A. & Zhang, Y. (2023). AI-powered touch points in the customer journey: A systematic literature review and research agenda: An International Journal. *Journal of Research in Interactive Marketing*, 17(4), 620–639.
<https://doi.org/10.1108/JRIM-03-2022-0082>

Hollebeek, L. D., Menidjel, C., Sarstedt, M., Jansson, J., & Urbonavicius, S. (2024). Engaging consumers through

- artificially intelligent technologies: Systematic review, conceptual model, and further research. *Psychology & Marketing*, 1. <https://doi.org/10.1002/mar.21957>
- How gen AI is joining the holiday shopping season. (2023, December 6). CIO.
- Hunter, M. (2023, October). How to use ChatGPT and AI to sell. *Agency Sales*, 53(10), 42-45.
- Jain, K. (2023, December 9). From click to conversion: The Gen AI revolution in e-commerce dynamics. *Financial Express*.
- Jenner, S. (2023, June). Embracing generative AI: Why its disruption is positive for pharma. *Pharmaceutical Executive*, 43(6), 28-30.
- Kaartemo, V. & Helkkula, A. (2018). A Systematic Review of Artificial Intelligence and Robots in ValueCo-creation: Current Status and Future Research Avenues. *Journal of Creating Value*, 4(2), 211–228. <https://doi.org/10.1177/2394964318805625>
- Kelly, C. (2023, December 5). What Coca-Cola's generative AI experiments mean for the brand's future. *Marketing Dive*.
- Krefetz, N. (2023, September/October). Generative AI and the future of media tech. *Streaming Media*, 20(5), 42-45.
- Kim, T., Usman, U., Garvey, A., & Duhachek, A. (2023). Artificial Intelligence in Marketing and Consumer Behavior Research. *Foundations & Trends in Marketing*, 18(1), 1–93. <https://doi.org/10.1561/17000000078>
- Land, B. (2023, September/October). Unleash the potential of generative AI and large language models. *KM World*, 32(5), S28.
- Laszkiewicz, A. & Magdalena Kalinska-Kula. (2023). Virtual influencers as an emerging marketing theory: A systematic literature review. *International Journal of Consumer Studies*, 47(6), 2479–2494. <https://doi.org/10.1111/ijcs.12956>
- Lee, A. (2023, June 28). Rise of the retail bots. *Women's Wear Daily*, 15.
- Mariani, M. M., Rodrigo Perez-Vega, & Wirtz, J. (2022). AI in marketing, consumer research and psychology: A systematic literature review and research agenda. *Psychology & Marketing*, 39(4), 755–776. <https://doi.org/10.1002/mar.21619>
- Mehmood, K., Verleye, K., De Keyser, A., & Larivière, B. (2023). Piloting personalization research through data-rich environments: A literature review and future research agenda. *Journal of Service Management*, 34(3), 520–552. <https://doi.org/10.1108/JOSM-10-2021-0405>
- Nott, G. (2023, April 8). I will revolutionise grocery says ChatGPT: Generative AI is already being used on food and drink NPD, and to aid marketing and customer service. What are the pros and cons? *Grocer*, 26.
- Online shoppers like ChatGPT. (2023, May). *Customer Relationship Management*, 27(4), 12.
- Pophal, L. (2023, July/August). AI captures the most mindshare, but marketers have more on their plates. *Customer Relationship Management*, 27(6), 20-23.
- Real or fake? The IP risks of 'synthetic' media. (2023, November 2). *Managing Intellectual Property*.
- Riedel, A., Mulcahy, R., & Northey, G. (2022). Feeling the love? How consumer's political ideology shapes responses to AI financial service delivery. *The International Journal of Bank Marketing*, 40(6), 1102–1132. <https://doi.org/10.1108/IJBM-09-2021-0438>

- Schiessl, D., Dias, H. B. A., & Korelo, J. C. (2022). Artificial intelligence in marketing: A network analysis and future agenda. *Journal of Marketing Analytics*, 10(3), 207–218. <https://doi.org/10.1057/s41270-021-00143-6>
- Schuman, N. (2023, January 25). How should communicators use ChatGPT? PR News (Online).
- Sidlauskiene, J. (2022). What Drives Consumers' Decisions to Use Intelligent Agent Technologies? A Systematic Review. *Journal of Internet Commerce*, 21(4), 438–475. <https://doi.org/10.1080/15332861.2021.1961192>
- Singh, R. K. (2023, October 11) Advertising and AI: With the first anniversary of ChatGPT, it is important to look at how AI can coexist with stakeholders in current landscape. *Financial Express*.
- Sinha, A. (2023, September 9). The impact of generative AI on marketing and advertising. *Financial Express*.
- Sinnock, B. (2023, July 1). Automation to reach the next generation: How mortgage lenders are using ChatGPT and other technologies to attract younger borrowers who wouldn't accept less than very interactive and customized online services. *National Mortgage News*, 47(8), 18.
- Talwar, K. (2023, August 14). New research reveals the potential of commerce in the age of generative AI. *Women's Wear Daily*, 16.
- Tan, A. (2023, July 18). How AI ethics is coming to the fore with generative AI: The hype around ChatGPT is driving interest in AI and putting ethical considerations into focus. *Computer Weekly*, 16-19.
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British journal of management*, 14(3), 207-222.
- Zinkula, J. (2023, October 18). Meet the typical at-work ChatGPT user: A millennial secretly submitting writing tasks who's a bit worried AI will replace them. *Business Insider*.

SESSION 11.4: FROM VALUES TO BEHAVIOR: BIAS, BURDEN, AND RETURNS

Moderators:

Silvia Fernadenez-Martinez

Summary Brief

Insights on Self-Report Bias in Consumer Research: A Novel Method for Detecting Initial Response Effects

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Self-report measures are widely used in consumer research, but psychology studies have documented a particular response pattern, known as the initial elevation (IE) effect, that has been attributed to biases in self-reports. Consequently, summary estimates of targeted behaviors can also be biased. The standard approach to testing for IE effects is to compare the mean response at the first assessment to the mean of subsequent responses, essentially assuming that only the first response is affected. Building on previous methodological research, this study develops a novel approach to test this assumption. Using daily measures of affect and TV use, the method is demonstrated and shown how it may be implemented with standard methods to better understand the impact of IE effects in consumer research.

Introduction

Valued for their general ease in data collection and relatively low in cost, self-report survey data are routinely used in consumer behavior research. Interestingly, a recent study of daily self-reported media use documented a tendency for respondents to report greater media use on the first interview day relative to their use on the days that followed. This was an unexpected finding because the daily diary data came from an observational study in which participants first began their daily assessments at randomly assigned days of the week and times of the year. As a result, the mean of reported time spent engaged with the targeted media was not expected to differ between the initial interview and those on subsequent days.

This tendency of self-report measures to show a pattern of response in which initial assessments are more extreme than later ones, referred to as the "initial elevation" (IE) effect, has been studied in psychology and documented for a variety of variables, including both psychological and behavioral. Though once widely assumed to be reflective of an attenuation in responses, more recent experimental research supports the idea that the response pattern is reflecting an initial response bias. The wider problem is that without addressing this pattern of response bias in self-report measures, summary statistics and statistical inferences of measured behaviors can lead to biased conclusions. While methods that are typically used to test for IE effects are useful, they assume that only the first response carries the bias. This paper develops a method to relax this assumption, thus offering a test of this common assumption, while providing a more general framework for understanding how self-report biases may impact consumer behaviors.

This study is guided by two objectives. The first is to develop a quantitative method to assess the initial response bias by relaxing the assumption that the biased response affects the first interview alone. The second is to evaluate the new method by applying it to empirical data and comparing its performance to the standard approach that assumes that the response bias impacts only the first assessment.

Background

Consumer behavior research has long relied on consumer self-report measures of media use and affect (e.g., see Bowman and Tamborini 2015; Chen and Pham (2019); Cohen et al. 2008; Greenwood and Long 2009; Hoffner and Lee 2015; Holbrook and Hirschman, 1982; Schimmack and Crites 2005; Wolfers and Scheider 2021). For example, self-report measures of affect have been utilized in studies of shopping (Rick et al. 2014), dining (Gibson, 2006), and media use (Festinger and Katz, 1953; Knobloch-Westerwick and Alter, 2006; Nabi et al. 2017; Nabi and Krcmar 2004; Wolfers and Scheider 2021). Unlike media use behaviors that are generally considered to be objective

behaviors that could be measured by self-report or direct observation, self-report measures are essential for affective measures, such as positive and negative affect. Variables like these are not directly observable and must be inferred indirectly, such as through survey assessments. In either case, self-report measures are a common choice in consumer research.

Among other issues that affect self-report data, this source of behavioral measures has long been known to show a pattern in which the first assessment is more extreme than subsequent assessments (Knowles et al., 1996; Robins, 1985; Sharpe and Gilbert 1998; Shrout et al., 2018; Windle 1954). Earlier investigations into this response pattern suggested that the pattern was likely reflective of an attenuation in response, but a comprehensive experiment by Shrout et al. (2018) suggests that the pattern is reflective of an initial elevation bias. In either case, the importance of addressing potential biases in self-report data is obvious given the routine use of survey data in consumer research.

Daily Diary Data

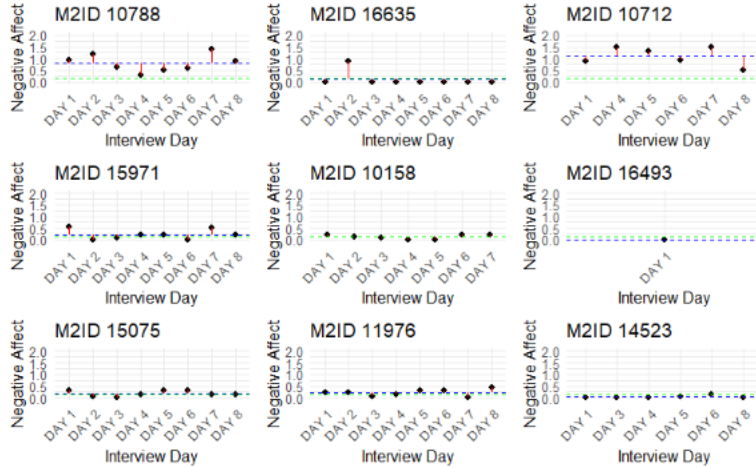
This study uses data from the Daily Diary Project that is part of the Midlife in the United States (MIDUS) Refresher 1 study (Ryff and Almeida, 2012–2014). The set includes self-report measures from a random sample of 782 adults who participated in a telephone interview for 8 consecutive days. Here, we focus on daily measures of affect and time spent watching TV. Each day, participants were asked to report on their behavior during the previous 24 hours. The day of the week when the daily interviews began varied between people. The sample was 55.6% female. Females were 47.6 (SD 12.9, min = 25, max = 75) years old on average; males were 48.2 (SD 12.5, min = 25, max = 75) years on average. The data set is publicly available from the Inter-university Consortium for Political and Social Research (ICPSR).

Proposed Analytic Approach

The proposed approach is developed using a mixed-effects model to account for dependencies in repeated measures. Though reports of daily experiences may vary within and between individuals, they are not expected to change systematically with time, such that scores are not expected to show an increase or decrease with time. To illustrate this, Figure 1 displays negative affect scores for 9 participants of the Daily Diary Project. As shown, the scores of individuals differ in their respective central tendencies (denoted by the dashed blue lines), while differing from the overall sample mean (denoted by the dashed green line) and in their day-to-day variability (shown by the red lines that run from the observed score (solid circle) to the individual's mean. To capture these aspects of daily measures, a mixed-effects model is formulated that includes an intercept to represent the population average response across days. For example, the average of daily scores across both interview days and people is reflective of the population average, or the typical response level. The model includes a random effect that varies by person, and this allows the daily means to vary between people. For example, affect scores that have been averaged across days for the individuals of a population would be expected to show differences between people, with a portion of the population having means above the population average and others having means below the population average.

Daily measures for a given individual may also vary from day to day, and further, the degree of variability may differ between people. That is, measures may fluctuate from one assessment to the next and the degree of fluctuation may also differ from one person to the next. Here, models can include a random intercept to allow the means of daily responses to differ between individuals and a random scale to allow individuals to differ in the degree of day-to-day variability.

Figure 1. Daily negative affect for 9 selected individuals.



Here we describe the general data analysis plan. Three models were fitted to sets of daily scores. The first served as a reference model and did not include any IE effect. For example,

No IE Effect:
$$Y_{it} = \mu + b_{0i} + \epsilon_{it}$$
 where Y_{it} is the response on day t for person i , μ is the expected response across days and individuals, b_{0i} is a random subject effect, and ϵ_{it} is the day and individual-specific residual. A random subject effect was assumed to be i.i.d. normal between people with mean 0 and variance σ^2 , where σ^2 reflects between-person variation in the means of scores across days as they vary about the population average μ .

The set of residuals for person i , ϵ_{it} , were assumed to be independent and identically distributed between people with mean 0 and a variance σ^2 . Initially, the residual variance was assumed to be constant across days and people. To permit heterogeneity of the residual variance between individuals, a random scale effect σ_i^2 was included in a model for the residual variance (cf: Hedeker, Mermelstein, & Demirtas, 2008). This allows the residual variance to vary according to the individual: σ_i^2 , where the exponentiated value of σ_i^2 is the residual variance for an individual whose random scale effect σ_i^2 . We fit two models: one that assumed a common variance for all individuals and a second that assumed the variance differed between individuals. A comparison of model fit was done to test if the random scale effect σ_i^2 was needed. If the random scale effect σ_i^2 was included, it was assumed to be i.i.d. normal between subjects with mean 0 and variance σ^2 . At the person level, the random effects could covary. A positive covariance would indicate that higher individual means correspond to greater day-to-day variation, and conversely, a negative covariance would indicate that higher individual means correspond to a lower degree of day-to-day variation. Based on the model that best characterized the residual variance, we proceeded as follows.

Next, a model was fit that assumed that only the first response showed an IE effect (the standard approach). Letting Y_{it} if Y_{it} was observed at the first interview and be equal to 0 otherwise, the model was specified as IE Effect at Day 1:
$$Y_{it} = \mu + b_{0i} + \epsilon_{it}$$
 where Y_{it} is the expected response on days that followed the first interview day, b_{0i} is a random subject effect, and ϵ_{it} is the day and individual-specific residual. The random subject effect was assumed to be i.i.d. normal between people with mean 0 and variance σ^2 , where σ^2 reflects between-person variation in means as they vary about the corresponding expected value. That is, for day 1, ϵ_{it} reflects between-person variation in scores as they deviate about the population average for day 1 ($\mu + \epsilon_{it}$), and for days 2-8, ϵ_{it} reflects between-person variation in scores as they deviate about the population average across those days (μ).

We proposed to allow the IE effect to follow an exponential function: Decaying IE Effect: [Equation], where [Equation] (asymptote) is the potential response level as time passes, [Equation] is expected difference in the response level between the first interview day and the potential level, [Equation] is the exponential decay factor that becomes smaller with time and so lessens the effect of [Equation] with time, b_{0i} is a random subject effect, and [Equation] is the day and individual-specific residual. The asymptote represents the response after the IE effects have diminished and could be the desired value for substantive interpretation. The random subject effect was assumed to be i.i.d. normal between people with mean 0 and variance [Equation], where [Equation] reflects between-person variation in means as they vary about the corresponding expected value. That is, for day 1, [Equation] reflects between-person variation in scores as they deviate about the population average for day 1 ([Equation]+[Equation]), and for the response potential, [Equation] reflects between-person variation in scores as they deviate about the population average potential ([Equation]).

These models were applied to daily negative affect scores. For reports of TV use, we applied a two-part mixed-effects model that is detailed in Blozis, Villarreal, Thota and Imperato (2019). A two-part mixed-effects model was used to account for the zeros in TV reports that reflected no time spent watching TV.

Findings

Daily Negative Affect

Results from fitting models to daily measures of negative affect are presented first. Daily affect scores were based on the average of responses to 14 questions that all shared this stem: “How much of the time today did you feel ...” that was then followed by a word meant to reflect negative affect. One example is “hopeless.” Responses used a 5-point scale (0: none of the time; 1: a little of the time; 2: some of the time; 3: most of the time; 4: all of the time). Cronbach’s alpha for the response set was .87. Higher negative affect scores reflect greater negative affect levels. Table 1 shows the estimated fixed effects from the fitted models. Comparisons of AIC values indicate that the model that assumed a decaying IE effect best fit the data. A comparison of the intercepts from the model that assumed no IE effect and that which assumed a decaying IE effect indicates a lower daily average after accounting for the IE effect (0.16 under the no IE effect model versus 0.13 under the decaying IE effect model). A comparison of the intercepts from the model that assumed an IE effect on day 1 and that which assumed a decaying IE effect also indicates a lower daily average after accounting for the IE effect as a slowly decaying effect as opposed to only the first interview day exhibiting the effect (0.15 under the day 1 IE effect model versus 0.13 under the decaying IE effect model). From this empirical example, we conclude that 1) the estimated daily average is slightly overestimated when the IE effect is ignored entirely but also when the effect is assumed to only impact responses on the first interview day.

Table 1. ML estimates from negative affect models TV (n = 782)			
Parameter	No IE effect	IE effect on day 1	Decaying IE effect
Fixed Effects	MLE (95% CI)	MLE (95% CI)	MLE (95% CI)
Intercept, [Equation]	0.16(0.15, 0.16)	0.15(0.14, 0.15)	0.13(0.12, 0.14)
IE effect, [Equation]		0.08(0.07, 0.09)	0.05(0.04, 0.06)
Decay rate, [Equation]			0.59(0.46, 0.71)
Variance Parameters			
Within-person, [Equation]	0.02	0.02	0.02
Between-person, [Equation]	0.16	0.16	0.16
Model fit indices			

-2lnL	-5283	-5764	-5924
AIC (smaller is better)	-5277	-5756	-5914

Daily TV Use

Results from fitting models to daily measures of time spent watching TV are presented here. Daily responses were self-reports of the total daily time spent watching TV. Following Blozis and Villarreal (2024), we created two new variables from the original report. That is, one variable was a binary (0/1) variable that was set equal to 0 if no time was spent and 1 if any time was spent. The second variable was a continuous measure of the reported time spent only if any positive amount of time was spent. The two variables were then studied jointly. Specifically, a logistic mixed-effects model was applied to the daily binary measures, and a generalized linear (assuming a lognormal response) mixed-effects model was applied to the continuous measures of time spent. The two models were linked by a covariance between their random effects. Because this report uses the same set of data reported in Blozis and Villarreal, we do not replicate the model expressions here. The novel aspect of our analysis here is the additional model that tested for a decaying IE effect on both the logit of watching TV and the time spent when TV was watched.

Comparisons of AIC values indicate that the model that assumed an IE effect on only the first day best fit the data. Drawing inferences from this model, a comparison of the intercepts from the model that assumed no IE effect and that which assumed an IE effect on day 1 indicates a greater likeliness to report that TV was watched on the first interview day relative to the days that followed. Further, the mean of day 1 reports of time spent was also higher relative to the mean of reports on the days that followed. From this example, we conclude 1) a greater likelihood of reporting media use on the first day, and 2) an elevated report in the time spent also on the first day. Biased reports are not apparent on days following the first, as evidenced by the relatively poorer fit of the model that allowed the IE effects to lessen across interview days.

Table 2. ML estimates of fixed effects for TV use models (n = 782)			
Parameter	No IE effect	Fixed IE effect on day 1	Decaying IE effect
TV use (yes/no)	MLE (95% CI)	MLE (95% CI)	MLE (95% CI)
Intercept, [Equation]	2.8 (2.7, 3.0)	2.8 (2.7, 2.9)	2.8 (2.6, 2.9)
IE effect, [Equation]		0.46 (0.29, 0.64)	0.18 (-0.04, 0.39)
Decay rate, [Equation]			1.0(-0.14, 2.2)
TV time spent	MLE (95% CI)	MLE (95% CI)	MLE (95% CI)
Intercept, [Equation]	0.49 (0.47, 0.52)	0.47 (0.45, 0.50)	0.47 (0.45, 0.50)
IE effect, [Equation]		0.15 (0.12, 0.17)	0.00 (-0.01, 0.01)
Decay rate, [Equation]			0.00 (-0.00, 0.00)
Model fit indices			
-2lnL	48095	47920	47918
AIC (smaller is better)	48113	47942	47944

Discussion

This study develops a novel method for testing for IE effects in self-report repeated measures data. With an increasing use of repeated measures data across disciplines, in conjunction with the routine use of self-report data, addressing biases in responses is critical for statistical inference. Standard methods for testing for these biased reports have relied on models that assume that only the first response is biased. Here, a novel method is developed that allows the bias to impact the first assessment and any number of the subsequent assessments under a decaying effect model. That is, any IE effect is assumed to have its greater effect on the initial assessment but is permitted to lessen in its impact as more repeated assessments are obtained. Thus, the method adds to the current methodological literature by 1) offering an alternative to the standard assessment and 2) providing a test of whether the standard

method is driving the observed response pattern.

Implications for Consumer Research

Using a large data set, the statistical analysis showed that the IE effect had its greatest impact on the initial assessment of affect and then lessened with time. For TV use, the analysis suggests that the IE effect impacts the assessment on the first day alone. For consumer research, this suggests that affective measures, such as negative affect, might be best studied by collecting multiple, repeated assessments to measure an individual's affective response that is less influenced by response biases. Relatively objective behaviors, such as time spent watching TV, that may be less impacted by IE effects may be best studied by obtaining at least a second assessment, possibly without a need for many repeated observations. Future work should apply these methods to more self-reported consumer behaviors to gain a better understanding. In any case, there is value in obtaining repeated assessments of variables obtained by self-report methods (typically survey methods) to understand response patterns that may be reflective in part of inherent reporting biases.

References

- Blozis, S.A., & Villarreal, R. (2024). On the use of self-reports in marketing research: Insights about initial response biases from daily diary data. *Journal of Marketing Analytics*.
- Blozis, S. A., Villarreal, R., Thota, S., & Imparato, N. (2019). Using a two-part mixed-effects model for understanding daily, individual-level media behavior. *Journal of Marketing Analytics*, 7(4), 234-250.
- Hedeker, D., Mermelstein, R. J., & Demirtas, H. (2008) An application of a mixed-effects location scale model for analysis of Ecological Momentary Assessment (EMA) data. *Biometrics*, 64(2): 627-634.
- Ryff, C.D., & Almeida, D. (2012–2014). Midlife in the United States (MIDUS Refresher): Daily diary project. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2018–06–06.

Summary Brief

From Values to Consumer Happiness: Analyzing Organic Food Purchase Intentions through the Theory of Consumption Values

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This working paper explores the role of Green Perceived Values (GPVs) in shaping consumers' purchase intentions for environmentally friendly products, considering the mediating effects of consumer happiness. Drawing on the dual dimensions of consumer happiness (hedonic, pleasure-oriented and eudaimonic, meaning-oriented) the study examines how different perceived green values (functional, social, emotional, conditional, and epistemic) influence well-being and, in turn, purchase decisions. The empirical phase will be conducted with consumers in Spain, using survey data and a structural equation modeling (SEM) approach. Expected results will provide theoretical contributions to the integration of sustainability-oriented value perceptions and positive psychology, as well as practical implications for green marketing strategies that aim to foster consumer happiness while promoting sustainable consumption.

Introduction

The growing interest in sustainable consumption has positioned organic products as a central focus in contemporary marketing and consumer behavior research. Consumers increasingly seek not only functional benefits but also emotional, social, and ethical value from their purchases. The Theory of Consumption Values (TCV) (Sheth et al., 1991) provides a robust framework to explain consumer decision-making by integrating multiple value dimensions that influence purchase behavior. Within the context of organic food, these value dimensions are referred to as Green Perceived Values (GPVs) (Lin & Huang, 2012), which represent consumers' evaluations of the benefits of organic products in relation to their expectations and sustainability concerns (Chen & Chang, 2012).

GPVs encompass five dimensions -functional, social, emotional, conditional, and epistemic value (Lin & Huang, 2012)- each reflecting a distinct motivational factor driving purchase intention. The functional value dimension is further divided into functional value-price (FV-P) and functional value-quality (FV-Q) to capture both monetary considerations and perceived product quality (Sweeney & Soutar, 2001; Rahnama, 2017). Alongside these utilitarian aspects, emotional, social, conditional, and epistemic values contribute to shaping a consumer's overall perception of organic products.

In parallel, consumer well-being has been increasingly conceptualized through the lens of hedonic happiness, which emphasizes pleasure and positive affect, and eudaimonic happiness, which focuses on meaning, purpose, and self-realization (Huta & Waterman, 2014; Cuesta-Valiño et al., 2023). Previous studies suggest that both dimensions of consumer happiness can significantly influence purchase intention (Shanmugavel, 2023), making them relevant mediators in the relationship between GPVs and consumer behavior.

While existing literature has examined the relationship between green perceived values and purchase intention, there is limited empirical evidence exploring how GPVs affect different dimensions of consumer happiness

(specifically hedonic and eudaimonic) and how these, in turn, influence purchase intention in the organic product market. Most studies have addressed consumer happiness as a single, undifferentiated construct, overlooking the potentially distinct pathways through which hedonic and eudaimonic well-being shape purchasing decisions. Addressing this gap will deepen our understanding of the psychological mechanisms linking sustainability-driven value perceptions with behavioral outcomes.

Background

The Theory of Consumption Values (TCV) (Sheth et al., 1991) posits that consumer decisions stem from a combination of benefits that products or services provide. The benefits, or consumption values, in the context of organic food, are called GPVs (Lin & Huang, 2012). They are consumers' evaluations of the benefits of organic food concerning their needs and expectations related to sustainability (Chen & Chang, 2012). TCV facilitates comprehension of the motivations driving consumer decisions and intentions, making it relevant in modern organic food literature (Chae et al., 2024; Nguyen et al., 2023; Roh et al., 2022). There are five GPVs: functional, social, emotional, conditional, and epistemic values (Lin & Huang, 2012). Functional value is a complex measure of perceived utility based on practical benefits and performance (Ghazali et al., 2017; Sweeney & Soutar, 2001); hence, this research opts for splitting it into functional value-price (FV-P) and functional value-quality (FV-Q) to better operationalize it, following recent GPV literature (Cao et al., 2022; Mohd Suki & Mohd Suki, 2015; Rahnema, 2017). Sweeney & Soutar (2001) defined FV-P as the benefits relative to the amount spent or value for money, while FV-Q assesses the benefits based on quality and efficacy. Social value (SV) refers to the expected outcome in terms of enhancing social variables, such as status and norms. Lin & Huang (2012) defined Emotional value (EMV) as the representation of the emotional states arising from purchases' alignment with personal beliefs in terms of health, sustainability, and ethics. Conditional value (CV) refers to the perceived benefit of a purchase under specific circumstances. Lastly, epistemic value (EPV) relates to a purchase's ability to provide satisfaction through cognitive stimulation (curiosity fulfillment and new knowledge acquisition) (Lin & Huang, 2012). Second, the psychological framework is built upon the distinction between hedonic well-being, focused on pleasure and positive affect, and eudaimonic well-being, centered on meaning and self-realization (Huta & Waterman, 2014). This distinction aligns closely with recent conceptualizations of consumer happiness as a multidimensional construct, which integrates not only immediate affective reactions but also longer-term evaluations of congruence, purpose, and emotional harmony (Cuesta-Valiño, Gutiérrez-Rodríguez, & Contreras-Contreras, 2023).

In this view, consumer happiness can be described as “a state of well-being associated with a specific consumption activity” (Mogilner et al., 2012). The current literature offers no universally accepted definition of this construct (Dhiman & Kumar, 2023); however, this lack of standardization has, in fact, fostered progress in our academic understanding of the concept. Consequently, numerous scholars have focused on exploring the significance of both hedonic and eudaimonic happiness within this framework (Chu, 2022). Empirical evidence indicates that these two forms of happiness exert a substantial influence on consumers' purchase intentions (Shanmugavel, 2023). It is therefore unsurprising that corporate governance regards consumer happiness (whether hedonic or eudaimonic) as a strategic asset for developing marketing initiatives aimed at actively stimulating the psychological desire to purchase goods or services (Tu & Hsee, 2016).

In the field of purchase intention, academics and marketers have examined strategies for crafting persuasive advertising messages and securing placements in mass media, with the goal of making consumers aware of, developing a preference for, and ultimately purchasing a brand (Shah et al., 2012). Traditional communication channels such as television, radio, and print media have long played a key role in shaping consumer perceptions and influencing purchasing behavior. Research by Kim and Lee (2020) further explored the relationship between consumer happiness and purchase intention, concluding that higher levels of happiness have a positive impact on the likelihood of making a purchase.

Methodology

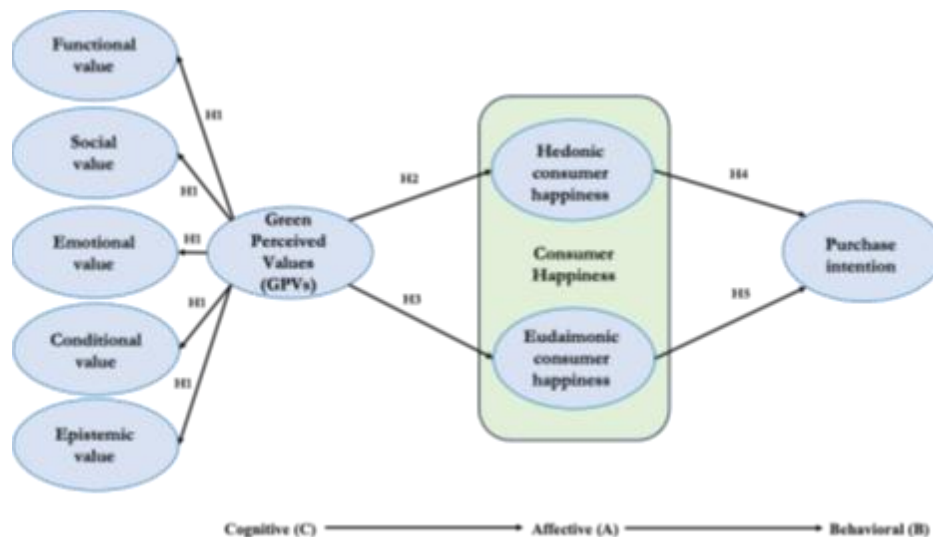
To empirically test the proposed conceptual model, a survey-based study will be conducted in Spain. The target population comprises adult consumers familiar with organic products. Sampling will follow a stratified random sampling method, using proportional allocation based on the official age distribution in Spain to ensure representativeness of different age groups. A minimum of 600 valid responses will be collected to guarantee statistical robustness and adequate model estimation.

The data collection instrument will consist of previously validated measurement scales. GPVs will be measured using the scale developed by Lin & Huang (2012). Consumer happiness will be assessed through hedonic and eudaimonic dimensions, employing the scales proposed by Fu & Wang (2021) and Cuesta-Valiño et al. (2022). Purchase intention will be measured using items adapted from Duffett (2015). All items will be evaluated on a Likert-type scale to capture the degree of agreement with each statement.

To validate the proposed hypotheses, the data will be analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). PLS is chosen for its suitability in testing complex models with multiple latent constructs, its ability to handle non-normal data distributions, and its effectiveness in prediction-oriented research. Moreover, PLS is appropriate for exploratory contexts where the primary objective is theory development rather than theory confirmation.

Grounded in the TCV (Sheth et al., 1991), this study examines the influence of GPVs on consumer happiness and purchase intention in the organic product market. GPVs represent consumers' evaluations of the benefits of organic products in alignment with their sustainability-related needs and expectations (Lin & Huang, 2012; Chen & Chang, 2012).

Figure 1. Proposed Model



Given the multidimensional nature of GPVs, the first hypothesis addresses their internal structure:

H1: Green Perceived Values (GPVs) are a higher-order construct composed of six dimensions: functional value–price (FV-P), functional value–quality (FV-Q), social value (SV), emotional value (EMV), conditional value (CV), and epistemic value (EPV).

The remaining hypotheses focus on the causal relationships between GPVs, consumer happiness, and purchase intention:

H2: GPVs positively influence hedonic consumer happiness.

H3: GPVs positively influence eudaimonic consumer happiness.

H4: Hedonic consumer happiness positively influences purchase intention.

H5: Eudaimonic consumer happiness positively influences purchase intention.

This integrated set of hypotheses allows for the simultaneous validation of GPVs' measurement model (dimensional composition) and structural model (causal relationships), providing a comprehensive understanding of how sustainability-driven value perceptions affect consumer well-being and behavior in the organic product market. This methodological approach will allow for the assessment of both the measurement model and the structural relationships, providing empirical evidence on the validity of the proposed conceptual framework within the Spanish organic product market.

Expected Findings and Discussion

It is anticipated that the results will confirm the positive influence of Green Perceived Values (GPVs) on both hedonic and eudaimonic consumer happiness. In the context of organic products, this would indicate that when consumers perceive such goods as offering tangible benefits (e.g., quality, safety, and nutritional value) as well as intangible benefits (e.g., sustainability, environmental protection, and ethical responsibility), they are more likely to experience both pleasure-oriented and meaning-oriented well-being. This outcome would reinforce previous findings linking perceived value to consumer psychological states, while adding evidence specific to the sustainable food sector (Lin & Huang, 2012; Cuesta-Valiño et al., 2023).

Furthermore, it is expected that both hedonic and eudaimonic happiness will significantly and positively influence purchase intention for organic products. This suggests that consumers are not solely motivated by the immediate enjoyment derived from organic food consumption (e.g., taste, freshness, sensory satisfaction) but also by the deeper sense of purpose and fulfillment that comes from supporting environmental sustainability, fair trade, and health-conscious lifestyles. Such a dual motivation aligns with the conceptual distinction between short-term affective responses and long-term purpose-driven satisfaction (Shanmugavel, 2023).

If confirmed, these results would contribute to the literature by providing empirical evidence on the dual-pathway role of consumer happiness in driving purchase intention in the organic products market (a context where consumer choices are often shaped by both rational evaluations and value-based beliefs). From a managerial perspective, the findings would suggest that marketing strategies for organic products should integrate both

sensory/pleasure appeals (e.g., taste, freshness, enjoyment) and ethical/meaning appeals (e.g., environmental contribution, animal welfare, health benefits) to maximize engagement and loyalty.

Ultimately, this research would validate the Theory of Consumption Values within the specific domain of organic food, demonstrating that GPVs not only have a direct effect on purchase intention but also operate indirectly through the enhancement of hedonic and eudaimonic well-being. This reinforces the importance of designing value propositions in the organic market that go beyond functional quality to embrace holistic benefits, thereby deepening consumers' emotional connection and commitment to sustainable consumption.

References

- Cao, D., Zheng, Y., Liu, C., Yao, X., & Chen, S. (2022). Consumption values, anxiety and organic food purchasing behaviour considering the moderating role of sustainable consumption attitude. *British Food Journal*, 124(11), 3540–3562. <https://doi.org/10.1108/BFJ-06-2021-0647>
- Chae, M.-J., Kim, Y., & Roh, T. (2024). Consumers' attention, experience, and action to organic consumption: The moderating role of anticipated pride and moral obligation. *Journal of Retailing and Consumer Services*, 79, 103824. <https://doi.org/10.1016/j.jretconser.2024.103824>
- Chen, Y., & Chang, C. (2012). Enhance green purchase intentions. *Management Decision*, 50(3), 502–520. <https://doi.org/10.1108/00251741211216250>
- Chu, C. K. (2022). Savoring and the experiential advantage: savoring beliefs determine consumer happiness from experiential versus material purchases. *Personality and Individual Differences*, 195, 111636. <https://doi.org/10.1016/j.paid.2022.111636>
- Cuesta-Valiño, P., Gutiérrez-Rodríguez, P., & Nunez-Barriopedro, E. (2022). The role of consumer happiness in brand loyalty: a model of the satisfaction and brand image in fashion, *Corporate Governance*, 22(3), 458-473. <https://doi.org/10.1108/CG-03-2021-0099>
- Dhiman, N., & Kumar, A. (2023). What we know and don't know about consumer happiness: three-decade review, synthesis, and research propositions", *Journal of Interactive Marketing*, 58(2-3), 115-135. <https://doi.org/10.1177/10949968221095548>
- Duffett, R. G. (2015). Facebook advertising's influence on intention-to-purchase and purchase amongst Millennials. *Internet Research*, 25(4), 498-526, <https://doi.org/10.1108/IntR-01-2014-0020>

- Fu, Y.-K., & Wang, Y.-J. (2021). Experiential value influences authentic happiness and behavioural intention: lessons from Taiwan's tourism accommodation sector. *Tourism Review*, 71(1), 289-303. <https://doi.org/10.1108/TR-06-2019-0228>.
- Ghazali, E., Soon, P. C., Mutum, D. S., & Nguyen, B. (2017). Health and cosmetics: Investigating consumers' values for buying organic personal care products. *Journal of Retailing and Consumer Services*, 39, 154–163. <https://doi.org/https://doi.org/10.1016/j.jretconser.2017.08.002>
- Kim, H.Y., & Lee, Y. (2020). The effect of online customization on consumers' happiness and purchase intention and the mediating roles of autonomy, competence, and pride of authorship. *International Journal of Human-Computer Interaction*, 36(5), 403-413. <https://doi.org/10.1080/10447318.2019.1658375>.
- Lin, P.-C., & Huang, Y.-H. (2012). The influence factors on choice behavior regarding green products based on the theory of consumption values. *Journal of Cleaner Production*, 22(1), 11–18. <https://doi.org/https://doi.org/10.1016/j.jclepro.2011.10.002>
- Mogilner, C., Aaker, J., & Kamvar, S.D. (2012). How happiness affects choice. *Journal of Consumer Research*, 39(2), 429-443, <https://doi.org/10.1086/663774>.
- Mohd Suki, N., & Mohd Suki, N. (2015). Consumption values and consumer environmental concern regarding green products. *International Journal of Sustainable Development & World Ecology*, 22(3), 269–278. <https://doi.org/10.1080/13504509.2015.1013074>
- Nguyen, N. T., Zhang, Q., Rehman, S. U., Usman, M., & Palmucci, D. N. (2023). Organic food and obesity: factors influencing actual purchase of organic food in COVID-19 pandemic with moderating role of organic food availability. *British Food Journal*, 125(6), 2190–2216. <https://doi.org/10.1108/BFJ-02-2022-0120>
- Rahnama, H. (2017). Effect of Consumption Values on Women's Choice Behavior Toward Organic Foods: The Case of Organic Yogurt in Iran. *Journal of Food Products Marketing*, 23(2), 144–166. <https://doi.org/10.1080/10454446.2017.1244790>
- Roh, T., Seok, J., & Kim, Y. (2022). Unveiling ways to reach organic purchase: Green perceived value, perceived knowledge, attitude, subjective norm, and trust. *Journal of Retailing and Consumer Services*, 67, 102988. <https://doi.org/https://doi.org/10.1016/j.jretconser.2022.102988>

Shah, S.S.H., Aziz, J., Jaffari, A.R., Waris, S., Ejaz, W., Fatima, M., & Sherazi, S.K. (2012). The impact of brands on consumer purchase intentions. *Asian Journal of Business Management*, 4(2), 105-110.

Shanmugavel, N. (2023), "Hedonic motivation and ducoffe's web advertising model in estimating consumer purchase intention", *Global Business Review*, Vol. ahead-of-print No. ahead-of-print, doi: 10.1177/09721509231158174.

Sheth, J., Newman, B., & Gross, B. (1991). Why We Buy What We Buy: A Theory of Consumption Values. *Journal of Business Research*, 22, 159–170. [https://doi.org/10.1016/0148-2963\(91\)90050-8](https://doi.org/10.1016/0148-2963(91)90050-8)

Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing*, 77(2), 203–220. [https://doi.org/10.1016/S0022-4359\(01\)00041-0](https://doi.org/10.1016/S0022-4359(01)00041-0)

Tu, Y., & Hsee, C. K. (2016). Consumer happiness derived from inherent preferences versus learned preferences. *Current Opinion in Psychology*, 10, 83-88, <https://doi.org/10.1016/j.copsyc.2015.12.013>.

SESSION 11.5: SUSTAINABILITY, SOCIAL NORMS, AND CONSUMER CONSEQUENCES

Moderator:

Sooyeon Choi

Summary Brief

The Impact of the Fukushima Wastewater Discharge on Korean Consumers' Boycott Intentions toward Japanese Products

Byeonghwa Park, Valdosta State University, USA

Young Hye Jang, Kyungwoon University, Korea

Taewon Hwang, Valdosta State University, USA

This study investigates the impact of the Fukushima wastewater discharge on Korean consumers' intentions to participate in boycotts of Japanese products. Specifically, it explores the psychological and social mechanisms underlying such behavior by examining how consumers perceive their own roles in social activism and how historical animosity influences their boycott intentions. By addressing both individual and collective dimensions of consumer response, this study aims to uncover the broader implications of geopolitical tensions and environmental crises on contemporary consumer behavior. The findings are expected to contribute to the literature by offering a novel perspective on consumer activism and by empirically demonstrating how historical experiences and societal conflicts shape modern consumer attitudes and behaviors.

References available upon request.

SESSION 11.6: BUILDING PROFESSIONAL MARKETERS: PRACTICE, CREATIVITY, AND AI

Moderators:

Christine Summers

Summary Brief

Revenue Operations: Bridging Business Education and Growth Leadership with ROAII Framework for RevOps AI-Ready, Interoperable Growth Architecture

Joël Le Bon, Johns Hopkins University, USA

Revenue Operations (RevOps) has emerged as a strategic function for integrating revenue-generating and revenue-supporting functions into a cohesive architecture delivering predictable, scalable, and profitable growth. This paper introduces the ROAII model—Revenue Operations & AI Interoperability—as a growth learning architecture for aligning leadership, processes, systems, and technologies to enable cross-functional collaboration, maximize AI capabilities, and ensure interoperability across the go-to-market (GTM) ecosystem. Guided by Bloom’s Taxonomy, we propose a progression from foundational understanding to advanced application, analysis, evaluation, and creation of innovative revenue architectures. Building from management theory and practice, we outline the model’s foundations, layers, and outcomes, offering an educational pathway that closes skill gaps and positions marketing- and sales-trained graduates for Chief Revenue Officer (CRO) and other C-suite roles.

Introduction

In contemporary business environments, the orchestration of revenue growth has become increasingly complex, requiring the integration of multiple specialized functions such as marketing, sales, customer success, product management, finance, and enablement, into a cohesive system. These functions must work together to deliver seamless customer experiences and predictable, scalable financial results. The need for cross-functional alignment is heightened by the accelerating pace of technological change, the proliferation of digital customer touchpoints, and the adoption of artificial intelligence (AI) in forecasting, personalization, and process automation (Diorio et al. 2022; Subham 2025).

Revenue Operations (RevOps) has emerged as a governance and coordination function designed to address these challenges. It focuses on aligning strategy, people, processes, data, and technology across the go-to-market (GTM) ecosystem to optimize customer outcomes and revenue performance. This systemic approach is particularly critical in the face of siloed operations and technology stacks, where fragmented workflows and misaligned incentives undermine growth potential. To address this challenge, many organizations have created and elevated the role of the Chief Revenue Officer (CRO) to streamline revenue operations and drive growth through a more integrated, cross-functional approach. This role—identified as the fastest-growing executive position in the United States (Toker 2023)—is typically charged with aligning all revenue-related departments (e.g., product management, sales, marketing, customer success) within a cohesive strategy, while bridging traditionally siloed functions to focus collectively on revenue growth. Yet, despite this rapid adoption in practice, the academic literature on RevOps remains nascent, with only a few contributions from Diorio and colleagues (2022), Subham (2025), and a recent paper by Atefi and colleagues (2025) in the domain of revenue growth. From a marketing—and particularly sales—education perspective (Lai Bennejean and Dixon, 2025), no prior work has bridged the gap between practice, research, and education while also providing a comprehensive teaching framework for RevOps.

The objectives of this study are threefold: (1) to synthesize the theoretical foundations and managerial imperatives for interoperability and AI readiness within the RevOps function; (2) to articulate and elaborate the ROAII framework, including its core layers, mechanisms, and implementation pathways; and (3) to derive educational strategies for marketing educators to embed ROAII competencies in future growth leaders. By providing an academically grounded yet managerially relevant framework, this paper aims to advance the study and practice of RevOps, offering both a research agenda for scholars and marketing educators and an actionable blueprint for executives.

Background and Literature Review

From a research perspective, the theoretical foundations of RevOps and the ROAII framework draw on four established perspectives in strategic management and marketing: the resource-based view (RBV) (Barney 1991), dynamic capabilities (Teece et al. 1997), market orientation (Kohli and Jaworski 1990), and relationship marketing (Morgan and Hunt 1994). These perspectives provide explanatory power for understanding why interoperability and AI readiness are critical drivers of revenue operations effectiveness.

By integrating these perspectives, the ROAII framework captures both the structural requirements for RevOps effectiveness (interoperability) and the capability-building dimension (AI readiness). Interoperability ensures that systems, processes, and functions operate as a cohesive whole, while AI readiness equips organizations to embed advanced analytics and automation in ways that are ethical, explainable, and value-generating. This dual focus aligns resource deployment, market responsiveness, and customer relationship management within a single, cohesive framework.

From a marketing education and practice standpoint, the ROAII framework offers more than an operational blueprint—it provides a pedagogical foundation for developing future growth leaders. By framing RevOps competencies within a structured learning progression, marketing educators can design curricula that move learners from foundational knowledge toward higher-order strategic and creative capabilities. Embedding the ROAII framework into marketing and business curricula addresses critical skill gaps in RevOps, equipping graduates and executives to design, implement, and scale interoperable, AI-ready revenue systems.

Bloom's Taxonomy (Bloom et al. 1956) provides an effective framework for this progression, ensuring that learners first understand key concepts, then apply them in practical contexts, and ultimately analyze, evaluate, and create innovative RevOps solutions and marketing and sales education (Lai Bennejean and Dixon 2025; Wilson et al. 2018).

Discussion and Contributions

Implementing a comprehensive Revenue Operations (RevOps) strategy, function, and ecosystem presents a complex set of managerial challenges that extend well beyond operational coordination. One of the most significant obstacles is aligning diverse revenue-generating and revenue-supporting teams, each operating with distinct priorities, processes, and performance metrics. Sales teams often prioritize short-term revenue attainment, marketing may focus on lead generation and brand positioning, and customer success may center on retention and satisfaction. Without a unifying framework, these differences can reinforce organizational silos, dilute strategic focus, and constrain the organization's ability to orchestrate sustainable growth. Overcoming this fragmentation requires clearly defined go-to-market (GTM) objectives, shared performance indicators, unified governance mechanisms, and cross-functional leadership committed to a common revenue vision.

This study makes several contributions to the emerging academic discourse on Revenue Operations. It introduces the ROAII framework as the first integrated model to position interoperability and AI readiness as mutually reinforcing pillars of RevOps maturity. While prior literature has addressed operational alignment and technological enablement separately, the ROAII framework synthesizes these dimensions within a single architecture linking strategic alignment, cross-functional governance, interoperable systems, AI-enabled processes, and measurable outcomes.

The ROAII framework has direct implications for leaders across organizational levels. At the C-suite level, executives should position RevOps—and its interoperability and AI readiness objectives—as a strategic growth driver rather than a purely operational initiative. Capital allocation decisions should prioritize projects that enhance system integration, data quality, and AI capability, including investments in both technology infrastructure and talent development. Governance structures, such as revenue councils or steering committees, should be established to monitor ROAII-related performance indicators, enforce cross-functional alignment, and remove implementation barriers.

In an era of rising customer expectations, accelerating technological change, and intensifying competition, organizations that master both interoperability and AI readiness will be positioned to orchestrate revenue growth with agility, precision, and sustained impact. The ROAII framework offers not only a conceptual lens and managerial model but also a transformative educational pathway—embedding strategic, operational, and leadership competencies in

marketing curricula—to develop growth leadership capabilities and position marketing and sales professionals to be heard and heeded at the C-suite level.

References available upon request

Summary Brief

Exploring New Horizons in Artificial Intelligence and Purpose-Driven Curriculum Innovation.

Tendai Chikweche, Western Sydney University, Australia

Munir Hossain, Western Sydney University, Australia

Sabreena Amin, Western Sydney University, Australia

This study demonstrates the strategic and ethical use of artificial intelligence (AI) as a transformative tool in curriculum development, based on a postgraduate course exercise. It emphasizes the importance of integrating AI-driven digital pedagogy to enhance teachers' efficiency and create engaging, innovative learning experiences, particularly in marketing and innovation. The research provides a theoretical foundation for understanding how technology-enhanced tools can improve student engagement amid declining levels. It identifies barriers to adopting digital technologies and offers solutions for overcoming them. Additionally, the study presents a prototype for developing instructional resources using AI tools, such as ChatGPT, Canva, and H5P, which are integrated seamlessly into Learning Management Systems. A review of existing literature highlights progress in AI content development and the strategic value of content repositories. The paper underscores responsible AI use aligned with the United Nations' Sustainable Development Goals, promoting social responsibility and global citizenship. Overall, AI-supported curricula can boost engagement and contribute to sustainability, shaping the future of innovative education.

Keywords:

Student engagement, digital pedagogy, AI tools, purpose-driven curriculum innovation

SESSION 11.7: NOSTALGIA'S LIMITS, DIGITAL CULTURE'S DEMAND

Moderator:

Steven Mueller

Summary Brief

Exploring the Interaction of Digital Culture, Capabilities, and Readiness in Fostering Innovation: A Mindful Marketing Approach

Lalitha Kirsnan, Western Sydney University
Tendai Chikweche, Western Sydney University

This study examines how the relationship between organisational digital culture, digital capabilities, and digital innovation impacts the application of mindful marketing by ethnic female-owned SMEs' as part of their digital transformation strategy in a digitally disrupted operating environment. Using participatory action research with case studies, interviews, and observations of 23 SMEs in Greater Western Sydney, the research explores challenges faced by ethnic women entrepreneurs, grounded in intersectionality theory. Findings reveal a strong link between digital culture, capabilities, and innovation as enablers for mindful marketing with organisational readiness mediating this relationship. Results validate a conceptual model showing how mindful marketing can be implemented utilising digital capabilities and culture to drive innovation, highlighting that organisational readiness is crucial for fostering digital transformation and growth in ethnic female-led SMES. Practical guidelines for implementing mindful marketing through co-creation and collaboration with female marketing entrepreneurs are outlined.

Key words

Mindful marketing, digital culture, digital capabilities, digital readiness

Summary Brief

The Limited Moderating Role of Nostalgia Proneness

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Frank C. Butler, University of Tennessee at Chattanooga, USA

With consumers' desire to recapture the past, the prominence of nostalgia in marketing is ever growing across a variety of product categories. One way companies tap into nostalgia is through retro branding, or giving modern products a nostalgic feel by using sentimental design elements, such as previous packaging, past product aesthetics, or logos from the past (Brown et al., 2003b; Fort-Rioche & Ackermann, 2013; Holotová et al., 2020). Evoked nostalgia, through retro branding, is explored to examine the effects on consumer attitudes and purchase intentions for both hedonic and utilitarian products. Nostalgia proneness's moderating role is examined among the relationships between retro branding, attitude towards products (both utilitarian and hedonic), and purchase intentions. While nostalgia proneness was anticipated to significantly influence these relationships, findings revealed that it only moderates the effect of evoked nostalgia on product attitudes when the type of product (hedonic or utilitarian) aligns with the nature of the evoked nostalgia (Bunch, 2025).

Introduction

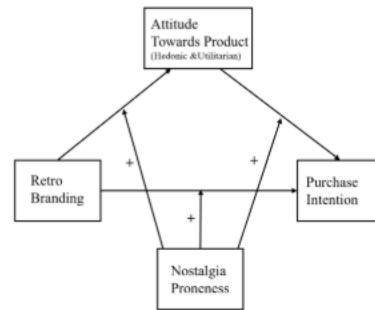
Nostalgia is a sentimental longing for the past that can be prompted by numerous stimuli (Holbrook & Schindler, 1991) and is often experienced more deeply by those who are more nostalgia-prone (Holbrook, 1993). While nostalgia can evoke “bittersweet” emotions, it plays a powerful role in marketing by connecting past experiences with the present (Havlena & Holak, 1991; Holak & Havlena, 1992, 1998). Marketers leverage nostalgia through strategies, like retro branding, to enhance brand recall, strengthen emotional connections, and influence consumer attitudes and purchase intentions by drawing on a brand's historical equity (Brown et al., 2003a). Nostalgia proneness refers to an individual's tendency to experience nostalgic emotions more frequently or intensely, which can influence behavior, preferences, and how consumers respond to nostalgic marketing (Hepper et al., 2012). An individual's tendency toward nostalgia can be difficult for marketers to assess due to its vague nature, yet research suggests that nostalgia proneness functions as both an antecedent and a moderator of evoked nostalgia, shaping consumer attitudes and purchase intentions (Srivastava et al., 2023). This study examines how individual nostalgia proneness moderates the relationship between a retro branded product, attitudes toward the product, and purchase intentions, using a vignette-based product survey.

Background

Nostalgia proneness refers to an individual's inclination to frequently experience nostalgia, often triggered by familiar objects, sounds, or memories (Hepper et al., 2012). It is considered a psychological trait that varies based on personal experiences, age, gender, and other personal identity factors (Davis, 1979). Nostalgia can take many forms, such as personal, historical, cultural, or virtual (Davis, 1979; Stern, 1992; Baker & Kennedy, 1994; Cui, 2015), and plays a significant role in shaping an individual's attitudes and behaviors (Abakoumkin et al., 2020). While it can lead to positive outcomes like comfort, belonging, and self-continuity (Wildschut & Sedikides, 2023), it can also evoke negative emotions such as sadness or longing (Barrett et al., 2010). In the context of marketing, an individual's proneness to nostalgia can deepen emotional responses to nostalgic stimuli like retro branding, which incorporates nostalgic design elements to appeal to consumers' memories of the past (Özhan & Akkaya, 2020). This study examines nostalgia proneness as a moderating factor in how consumers respond to retro branded products, particularly in relation to product attitudes and purchase intentions for hedonic (pleasure-focused) and utilitarian (function-focused) products (Bunch, 2025). Previous research suggests that nostalgic marketing strategies can positively influence brand attitudes (Ju et al., 2016) and purchase behaviors (Tang et al., 2023), especially for those prone to nostalgia.

Consumer attitudes toward products are shaped by the product's traits (Batra & Ahtola, 1991), whether hedonic or utilitarian, and can be influenced by an individual's nostalgia proneness, which affects how they evaluate and respond to nostalgic marketing (Zimmer et al., 1999). Retro branding tends to increase positive attitudes (Hallegatte et al., 2018); therefore, an individual's proneness towards nostalgia is anticipated to significantly moderate the relationship between retro branding and attitudes toward both hedonic and utilitarian products. Additionally, consumption reflects self-identity (Belk, 1990), and nostalgia can strengthen this connection by reviving memories of the past (Srivastava et al., 2023), leading to positive feelings and increased purchase intentions (Tang et al., 2023).

Therefore, nostalgia proneness is expected to positively moderate the relationship between retro branding and purchase intentions (Bunch, 2025). Finally, consumer attitudes play a key role in shaping purchase intentions (Braun-LaTour et al., 2007), and retro branding aims to strengthen these attitudes by evoking nostalgia. While retro branding is expected to enhance purchase intentions and attitudes for both hedonic and utilitarian products, nostalgia proneness is anticipated to positively moderate the relationship between attitude toward both product type and purchase intentions (Bunch, 2025).



Key Findings

A survey was created using established scales for each construct, distributed to 675 participants on Prolific, and examined using partial least squares structural equation modeling (PLS-SEM) (Hair et al., 2022). Participants were randomly assigned to complete a survey featuring either a hedonic retro branded product (a retro Bluetooth speaker) or a utilitarian retro branded product (a retro microwave). Products were selected based on classifications within the current literature (Barnwell et al., 2023; Khan et al., 2005; Lu et al., 2016).

For the hedonic retro branded product survey (e.g., Bluetooth speaker), results indicated that nostalgia proneness did significantly moderate the relationship between retro branding and attitude toward hedonic products ($b = 0.11$, $t = 2.23$, $p = 0.03$); however, it did not significantly moderate the relationship between retro branding and attitude towards utilitarian products ($b = 0.02$, $t = 0.44$, $p = 0.66$). Nostalgia proneness also did not significantly moderate the direct relationship between retro branding and purchase intentions ($b = 0.03$, $t = 0.40$, $p = 0.69$). Finally, nostalgia proneness did not significantly moderate the relationship between attitude toward hedonic products and purchase intentions ($b = 0.07$, $t = 1.45$, $p = 0.15$) or attitude towards utilitarian products and purchase intentions ($b = -0.05$, $t = 0.88$, $p = 0.38$).

For the utilitarian retro branded product survey (e.g., microwave image), results indicated that nostalgia proneness did not significantly moderate the relationship between retro branding and attitude toward hedonic products ($b = 0.01$, $t = 0.10$, $p = 0.92$); however, it did significantly moderate the relationship between retro branding and attitude towards utilitarian products ($b = 0.18$, $t = 4.02$, $p = 0.00$). Nostalgia proneness also did not significantly moderate the direct relationship between retro branding and purchase intentions ($b = 0.03$, $t = 0.48$, $p = 0.63$). Finally, nostalgia proneness did not significantly moderate the relationship between attitude toward hedonic products and purchase intentions ($b = 0.02$, $t = 0.39$, $p = 0.70$) or attitude towards utilitarian products and purchase intentions ($b = -0.02$, $t = 0.45$, $p = 0.66$).

Overall, the study investigated nostalgia proneness as a moderating factor in the relationship between evoked nostalgia (retro branded product image), consumer attitudes, and purchase intentions. Although it was anticipated to have a more significant impact on these relationships, the results revealed that nostalgia proneness only moderated the connection between evoked nostalgia and attitudes when the product type (hedonic or utilitarian) aligned with the type of nostalgia evoked (Bunch, 2025). Nostalgia proneness did not significantly moderate the relationship between evoked nostalgia and purchase intentions or between attitudes and purchase intentions, indicating that while nostalgia proneness may shape attitudes, it has limited influence on purchase intentions. These findings provide a more refined perspective on nostalgia's role in consumer decision-making and enlightening aspects of the framework proposed by Srivastava et al. (2023).

References

- Abakoumkin, G., Wildschut, T., & Sedikides, C. (2020). Nostalgia proneness and the collective self. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.570621>
- Baker, S. M., & Kennedy, P. F. (1994). Death by nostalgia: A diagnosis of context-specific cases. *ACR North American Advances*, 21, 169-174.
- Barnwell, R. W., Collier, J., & Shanahan, K. J. (2023). Nostalgia and forestalgia: Insights, evaluation, and implications for advertising and product typology. *Journal of Advertising*, 52(2), 193–210. <https://doi.org/10.1080/00913367.2022.2036652>
- Barrett, F. S., Grimm, K. J., Robins, R. W., Wildschut, T., Sedikides, C., & Janata, P. (2010). Music-evoked nostalgia: Affect, memory, and personality. *Emotion*, 10(3), 390–403. <https://doi.org/10.1037/a0019006>
- Batra, R., & Ahtola, O. T. (1991). Measuring the hedonic and utilitarian sources of consumer attitudes. *Marketing Letters*, 2(2), 159–170. <https://doi.org/10.1007/bf00436035>
- Belk, R. W. (1990). The role of possessions in constructing and maintaining a sense of past. *ACR North American Advances*.
- Braun-LaTour, K. A., LaTour, M. S., & Zinkhan, G. M. (2007). Using childhood memories to gain insight into brand meaning. *Journal of Marketing*, 71(2), 45–60. <https://doi.org/10.1509/jmkg.71.2.45>
- Brown, S., Kozinets, R. V., & Sherry, J. F. (2003a). Sell me the old, old story: Retromarketing management and the Art of Brand Revival. *Journal of Customer Behaviour*, 2(2), 133–147. <https://doi.org/10.1362/147539203322383537>
- Brown, S., Kozinets, R. V., & Sherry, J. F. (2003b). Teaching old brands new tricks: Retro branding and the revival of Brand meaning. *Journal of Marketing*, 67(3), 19–33. <https://doi.org/10.1509/jmkg.67.3.19.18657>
- Bunch, C. Y. (2025). The Role of Retro Branding on a Consumer's Attitude Toward Products and Purchase Intentions (Doctoral dissertation, University of South Alabama).

- Cui, R. (2015). A review of nostalgic marketing. *Journal of Service Science and Management*, 8(01), 125–131. <https://doi.org/10.4236/jssm.2015.81015>
- Davis, F. (1979). *Yearning for Yesterday: A Sociology of Nostalgia*. Free Press.
- Fort-Rioche, L., & Ackermann, C.-L. (2013). Consumer innovativeness, perceived innovation and attitude towards “Neo-retro”-product design. *European Journal of Innovation Management*, 16(4), 495–516. <https://doi.org/10.1108/ejim-02-2013-0013>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equations modeling (PLS-SEM)*. SAGE.
- Hallegatte, D., Ertz, M., & Marticotte, F. (2018). Blending the past and present in a retro branded music concert: The impact of nostalgia proneness. *Journal of Product & Brand Management*, 27(5), 484–497. <https://doi.org/10.1108/jpbm-08-2017-1546>
- Havlena, W. J., & Holak, S. L. (1991). “The good old days:” Observations on nostalgia and its role in consumer behavior. *Advances in Consumer Research*, 18(1).
- Hepper, E. G., Ritchie, T. D., Sedikides, C., & Wildschut, T. (2012). Odyssey’s end: Lay conceptions of nostalgia reflect its original Homeric meaning. *Emotion*, 12(1), 102–119. <https://doi.org/10.1037/a0025167>
- Holak, S. L., & Havlena, W. J. (1992). Nostalgia: An exploratory study of themes and emotions in the nostalgic experience. *Advances in Consumer Research*, 19(1).
- Holak, S. L., & Havlena, W. J. (1998). Feelings, fantasies, and Memories. *Journal of Business Research*, 42(3), 217–226. [https://doi.org/10.1016/s0148-2963\(97\)00119-7](https://doi.org/10.1016/s0148-2963(97)00119-7)
- Holbrook, M. B. (1993). Nostalgia and consumption preferences: Some emerging patterns of consumer tastes. *Journal of Consumer Research*, 20(2), 245–256. <https://doi.org/10.1086/209346>

- Holbrook, M. B., & Schindler, R. M. (1991). Echoes of the dear departed past: Some work in progress on nostalgia. *ACR North American Advances*, 18, 330-333.
- Holotová, M., Kádeková, Z., & Košičiarová, I. (2020). Retro marketing-a power of nostalgia which works among the audience. *Communication Today*, 11(2).
- Ju, I., Kim, J., Chang, M. J., & Bluck, S. (2016). Nostalgic marketing, perceived self-continuity, and consumer decisions. *Management Decision*, 54(8), 2063–2083. <https://doi.org/10.1108/md-11-2015-0501>
- Khan, U., Dhar, R., & Wertenbroch, K. (2005). A behavioral decision theory perspective on hedonic and utilitarian choice. *Inside Consumption*, 144-165.
- Lu, J., Liu, Z., & Fang, Z. (2016). Hedonic products for you, utilitarian products for me. *Judgment and Decision Making*, 11(4), 332–341. <https://doi.org/10.1017/s1930297500003764>
- Özhan, Ş., & Akkaya, D. T. (2020). The effect of nostalgia proneness on ad-evoked nostalgia, brand attitude and purchase intention. *Istanbul Business Research*, 49(2), 380–396. <https://doi.org/10.26650/ibr.2020.49.0050>
- Srivastava, E., Sivakumaran, B., Maheswarappa, S. S., & Paul, J. (2023). Nostalgia: A review, Propositions, and future research agenda. *Journal of Advertising*, 52(4), 613–632. <https://doi.org/10.1080/00913367.2022.2101036>
- Stern, B. B. (1992). Historical and personal nostalgia in advertising text: The fin de siècle effect. *Journal of Advertising*, 21(4), 11–22. <https://doi.org/10.1080/00913367.1992.10673382>
- Tang, D., Zheng, Q., Xu, B., Zheng, M., & Chen, J. (2023). Value of nostalgia to agricultural heritage: Consumer's nostalgia proneness and purchase intention toward traditional tea. *Journal of Cleaner Production*, 395, 136411. <https://doi.org/10.1016/j.jclepro.2023.136411>
- Wildschut, T., & Sedikides, C. (2023). Benefits of nostalgia in vulnerable populations. *European Review of Social Psychology*, 34(1), 44–91. <https://doi.org/10.1080/10463283.2022.2036005>

Zimmer, M. R., Little, S. K., & Griffiths, J. S. (1999). The impact of nostalgia proneness and need for uniqueness on consumer perceptions of historical branding strategies. Conference Proceedings. In 1999 AMA winter educators' conference: Marketing theory and applications (Vol. 10, p. 259). [Essay]. American Marketing Association.

Summary Brief

Safeguarding Marketing Secrets: Triggers, Predispositions, and Processes Leading to Unauthorized Disclosures in Competitive Industries

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Unauthorized disclosures of marketing secrets, such as trade secrets, internal strategies, and customer data, pose significant threats to organizational competitiveness. By synthesizing interdisciplinary literature and applying Lewin's Field Theory, this review categorizes factors into environmental triggers (e.g., perceived injustice, financial pressures), individual predispositions (e.g., entitlement, greed), and cognitive processes (e.g., rationalization, revenge), proposing a dynamic model to predict and prevent leaks. Marketing managers can use this framework to design targeted interventions, enhancing secrecy protocols and preserving strategic positioning in industries like consumer goods and social media.

Introduction

In competitive industries, the unauthorized disclosure of marketing secrets—ranging from proprietary formulas and customer data to internal strategies—can erode market share, damage brand reputation, and result in substantial financial losses (Herbig, 2017).

For instance, in the 2014 Snapchat case, a former marketing employee leaked internal emails and documents after being laid off, driven by perceived injustice and entitlement, which compromised Snapchat's positioning against rivals like Instagram. In 2019, Dr. Xiaorong You stole \$120 million in trade secrets from Coca-Cola, stemming from greed and unchecked access, which endangered product formulas and branding (Hannah, 2005). As another example, Elon Musk's 2022 acquisition of Twitter, a disgruntled employee shared advertising algorithms with The Verge, motivated by frustration with leadership shifts, which undermined user engagement campaigns and ad revenue models. These incidents show how insiders can reveal marketing information, underscoring the need for a targeted framework to grasp disclosure risks in marketing.

While models like MICE (Money, Ideology, Coercion, Ego) tackle general espionage, they fall short on marketing nuances, such as how workplace stressors combine with personality traits to trigger leaks that affect customer segmentation or brand equity (Sulick, 2013). This review addresses this gap by compiling factors from marketing, psychology, and information security literature, focusing on marketing-specific applications to protect trade secrets, strategies, and brand and consumer data.

Background

Marketing secrets, defined as confidential information protected by NDAs or informal norms, such as proprietary formulas, customer insights, campaign plans, are essential for sustaining market advantages. Breaches often involve insiders abusing access, as seen in the 2018 PepsiCo case where a product manager stole beverage formulas and taste-testing data for a competitor, driven by greed (predisposition) and a lucrative job offer (trigger), rationalized through cost-benefit analysis (process). Such disclosures jeopardize product differentiation in crowded markets.

Key factors from the literature include financial incentives, perceived injustice (e.g., layoffs), and opportunities like unrestricted data access. Individual predispositions encompass traits like entitlement, impulsivity, and greed, often amplified in high-pressure marketing roles. Cognitive processes, such as revenge or denial, enable individuals to justify actions, overriding ethical barriers (Bandura, 1999). For instance, in the AT&T 2024 leak, an employee sold customer data for financial gain, facilitated by downplaying risks through rationalization.

Grounded in Lewin's Field Theory (1951), which views behavior as person-environment interactions, these factors interact dynamically. Triggers exploit predispositions, engaging processes that heighten disclosure risk. In marketing, this manifests in leaks that expose strategies to rivals, as in Snapchat's case, where revenge targeted corporate mismanagement, benefiting competitors like Instagram.

The Proposed Model

Our model organizes factors into three categories: triggers (situational, e.g., financial pressure in volatile markets), predispositions (stable traits, e.g., entitlement in creative marketing teams), and processes (mechanisms, e.g., rationalization during competitive bids) (Posey *et al.*, 2011). Interactions amplify risks; for example, opportunity (trigger) paired with greed (predisposition) may trigger cost-benefit analysis (process), leading to theft, as demonstrated in Coca-Cola's case.

Broader contexts, like technological advancements enabling easier data sharing, heighten marketing vulnerabilities. The model predicts synergistic effects: High cognitive load from secrecy burden (e.g., rumination over unreleased campaigns) increases accidental leaks, while moral disengagement facilitates intentional ones.

Applied to marketing, the model guides prevention: Reduce triggers via equitable practices and justice perceptions; evaluate for predispositions during recruitment; disrupt processes through ethics training. For instance, monitoring disgruntlement post-restructuring could possibly have prevented leaks like Twitter's. Hypothetically, a marketer facing financial duress (trigger), who has impulsive tendencies (predisposition), could leak consumer segmentation data during a CRM migration. The individual might rationalize this decision to leak as low-risk (process), allowing rivals to poach consumers and erode market share from the company.

Implications for Marketing

In a May 2025 Adidas breach, attackers accessed customer names, emails, and inquiry logs via a third-party platform, exposing data used for personalized marketing and loyalty programs, which damaged brand trust and hindered targeted campaigns. There are important lessons to be learned from such cases. This proposed framework equips marketing strategists to safeguard secrets, informing policies like enhanced access controls and behavioral monitoring (Maasberg *et al.*, 2015). For example, our findings include supporting integrating leak risk assessments for marketing audits, ensuring NDAs cover collaborative tools like cloud platforms where marketing campaign data resides. By addressing predispositions in team hiring, marketers can foster cultures that prioritize brand integrity, reducing revenge-driven leaks that harm equity. Future research should test interactions empirically, using marketing case studies to refine interventions.

References

Bandura, A. (1999). Moral Disengagement in the Perpetration of Inhumanities. *Personality and Social Psychology Review*, 3(3), 193-209.

Hannah, D.R. (2005). Should I keep a secret? The effects of trade secret protection procedures on employees' obligations to protect trade secrets. *Organization Science*, 16(1), 71-84.

Herbig, K. L. (2017). The expanding spectrum of espionage by Americans, 1947–2015. PERSEREC Technical Report.

Lewin, K. (1951). *Field theory in social science*. New York: Harper.

Maasberg, M., Warren, J., & Beebe, N. L. (2015). The dark side of the insider: detecting the insider threat through examination of dark triad personality traits. In 2015 48th Hawaii International Conference on System Sciences (pp. 3518-3526). IEEE.

Posey, C., Bennett, R. J., & Roberts, T. L. (2011). Understanding the mindset of the abusive insider: An examination of insiders' causal reasoning following internal security changes. *Computers & Security*, 30(6), 486-497.

Sulick, M. J. (2013). *American spies: Espionage against the United States from the Cold War to the present*. Washington D.C.: Georgetown University Press.

SESSION 11.8: FROM EYE CONTACT TO AI: WHAT MOVES THE SALE

Moderators:

Brett Kazandijan

Summary Brief

Salesperson Motivation Changes During Early Employment

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Introduction

Salesperson motivation is a critical driver of performance and turnover, yet its natural change patterns remain underexplored. Drawing on Expectancy Theory and Organizational Socialization Theory, this study investigates how newly hired salespeople's motivation changes during their first two years. Using a longitudinal dataset of 1,436 insurance salespeople across 60 companies in the U.S. and Canada, the research examines trajectories of overall, intrinsic, and extrinsic motivation, as well as their components (expectancy, instrumentality, and valence). The study also explores the moderating roles of pre-employment experience and realistic job preview (RJP) during onboarding.

Methodology

The study employs hierarchical linear modeling (HLM) with four survey waves (entry, 6 months, 1 year, 2 years). Motivation components were measured with established expectancy theory scales, and moderators included industry-specific sales experience and RJP. Control variables were age, gender, education, and training. HLM allowed identification of nonlinear trajectories and testing of moderator effects across individuals over time.

Key Findings

This study contributes to sales and HR literature by:

- Establishing motivation trajectories: Expectancy, intrinsic/extrinsic instrumentality, and overall motivation follow U-shaped patterns, with declines in the first year and recovery thereafter. Intrinsic valence increases linearly, while extrinsic valence shows an inverted U-shape.
- Differentiating intrinsic vs. extrinsic motivation: Intrinsic motivation changes more significantly than extrinsic motivation, which remains relatively stable.
- Highlighting moderator effects: Industry-specific experience raises initial motivation levels but does not alter trajectory. In contrast, general sales experience reduces long-term motivation. RJP consistently enhance expectancy, instrumentality, and motivation, mitigating declines and sustaining higher levels over time.
- Providing managerial insights: Managers should anticipate motivation dips around 1–1.5 years and intervene with training, feedback, and experience-sharing. They should tailor rewards to tenure—extrinsic rewards (incentives, promotions) early on, and intrinsic rewards (autonomy, accomplishment) later. RJP are essential for maintaining motivation from the start.

Summary Brief

Is Seeing Eye to Eye Possible in Virtual Meetings? The Effect of Eye Contact in Video-Mediated Sales Interactions

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Eye contact is an important element of direct interpersonal communication, but video calls alter aspects of how we establish and maintain it due to how cameras are positioned on devices used for video meetings. While visual communication channels' influence on mutual gaze has been observed in the field of display technologies and applications for some time, studies of its effects on virtual sales interactions have been limited. Two studies – one in the lab and one involving salespeople – shed light on how in a video sales interaction the angle between the viewing direction of a buyer and their video monitor's camera's optical axis affects the buyer's focus, emotions, and willingness to move forward with the sales process. Findings and implications are discussed that suggest that sellers should rely less on their own and pay more attention to buyers' perceptions of the level of eye contact during virtual sales meetings.

Background

Mutual gaze, or eye contact, has been extensively studied in the field of psychology as an important element of nonverbal communication and regulator of social interactions (Hietanen et al. 2008, Redcay & Schilbach 2019). In informal settings mutual gaze is often interpreted as a sign of liking and attraction, while in professional contexts it is associated with perceptions of competence and intelligence (Sodikoff et al. 1974). Eye contact also leads to enhanced memory, self-evaluation, and sociability (Conty et al. 2016). Some of the negative applications of gaze occur when it is used as a tool to communicate dominance and even hostility (Burgoon & Le Poire 1999).

Advances in technology had already introduced the option of videoconferencing as a substitution for face-to-face interaction, but it was the COVID-19 pandemic that forced society to rethink and reimagine in earnest the way we communicate with each other in real time. The ensuing lockdowns meant that a vast majority of the meetings normally conducted in person had to go online. The use of videoconferencing platforms such as Zoom, Blackboard Collaborate, and Microsoft Teams skyrocketed (Lieberman 2020), but organizations quickly realized these cannot always entirely substitute face-to-face interaction with one of the major downsides being the perceived lack of eye contact (Grondin et al. 2020) as the angle of video capturing cameras of most devices relative to their displays where the faces of our video conversation partners appear create the perception that interlocutors are looking away from each other's faces while communicating (Qin et al. 2015). Naturally, such situations introduce the possibility of a disruption of the implicit rules of the conversational dynamic that we as humans stick to when meeting someone face to face, which may have negative effects on communication effectiveness (Bohannon et al. 2013, Jaklic et al. 2017).

Although eye contact has been identified by sales professionals as an important trust builder (Arndt et al. 2020), especially in the very early stages of a buyer-seller relationship (Leeds 1992), its effects in sales settings have not been widely studied in the context of sales meetings mediated by videoconferencing platforms (Fullwood & Morris 2013, Peterson 2005, Xu et al. 2024). This research is looking to assist in closing this gap by exploring the impact of eye contact on sales performance.

Method and Results

Two studies – one with a student sample conducted in the lab using data from eye tracking and facial expression analysis, and another involving survey data collected from an online survey platform panel – manipulated a salesperson's gaze angle (looking at the camera vs. not looking at the camera) in a video pitch shown to respondents. The video was two and a half minutes long, discussed the benefits of a student sales competition organized by a university, and was aimed at recruiters and sales managers who hire new salespeople on college campuses. Results of Study 1 indicate that viewers in the eye-contact condition focused more on the speaker's face

and experienced more positive emotions during the video relative to viewers in the no-eye-contact condition. Furthermore, Study 2 hints at the possibility that the presence (vs. absence) of eye contact leads to higher willingness to complete the sales transaction – an effect fully mediated by respondents' perceptions of how informative the video was.

For the analysis of Study 1, we first looked at the output of the eye tracking. The heat maps in Figure 1 below were generated using the X and Y fixation point collected in iMotions and make it clear that the video with the high level eye contact drew the attention of the respondents to the eyes of the associate/ 'salesperson' in the video, whereas the lack of eye contact dispersed the viewers' focus to the surroundings to a greater extent.

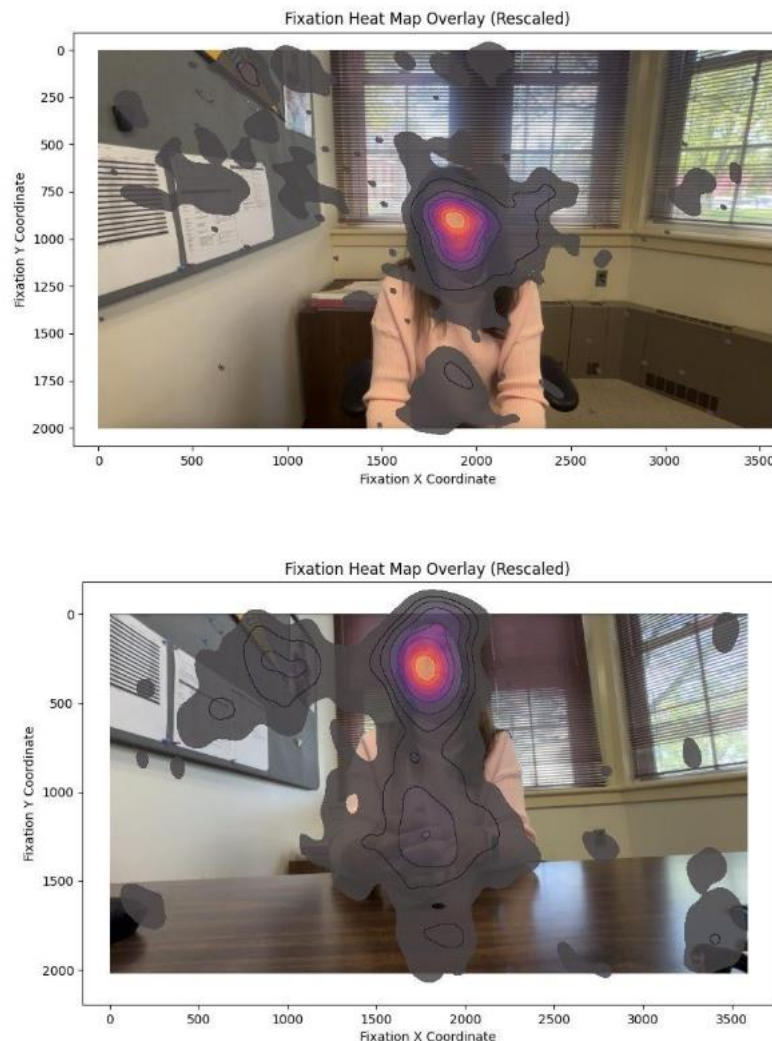


Figure 1: Study 1 Results - Heat maps for the eye-contact (above) and no-eye-contact (below) conditions

In addition to the eye tracking device mentioned above, a webcam was used to film respondents' faces and used iMotions to conduct a facial expression analysis. This study is exploratory and offers interesting results. As we expected, the results suggest that respondents in the no-eye-contact condition experienced more negative emotions during the video relative to viewers in the eye-contact condition. To compare emotional and engagement responses between the two groups, independent samples t-tests were conducted for each emotion. Results revealed that no-eye-contact respondents exhibited significantly higher levels of anger above a threshold of 50 ($M = 70.60$) compared to the eye-contact group ($M = 61.77$), $t(29.99) = 2.99$, $p = .005$, 95% CI [2.82, 14.85].

In contrast, the eye-contact condition ($M = 10.01$) demonstrated a higher positive emotional tone (valence) than the no-eye-contact condition ($M = 4.55$), $t(47.81) = -2.31, p = .025$, 95% CI $[-10.22, -0.70]$. Lastly, and unexpectedly, for engagement, the no-eye-contact condition ($M = 85.75$) was slightly higher than the eye-contact condition ($M = 82.36$), $t(47.15) = 2.09, p = .042$, 95% CI $[0.13, 6.65]$.

Following the results of Study 1, it is clear that the camera position has an impact on the viewers' reactions. Leveraging the findings of the first study, we wanted to further explore the impact of the webcam position in a sales call. Specifically, we wanted to see if the impact of the webcam angle on the respondents' perceptions of the informativeness of the video and how that ultimately impacts the willingness to buy (or in this case the willingness to sponsor a sales competition). Lastly, because Study 1 identified how emotions differ across the two scenarios, we wanted to see how the level of self-monitoring moderates the relationship between informativeness and willingness to sponsor. To test those relationships, we conducted an experimental survey using a Prolific panel. Specifically, we selected respondents who had a role as a salesperson to increase realism. We collected data from a total of 275 respondents and used 262 in the analysis after removing those who failed the attention check. Similarly to study 1, respondents were shown the same video but with a different angle for the no-eye-contact condition, followed by a short survey.

To test the proposed moderated mediation, the data were examined with 5,000 bootstrap samples using Model 14 of PROCESS for R (Hayes, 2022). Given the theoretical focus on the role of informativeness, we first discuss these results in isolation and then present the conditional indirect effects at varying levels of self-monitoring.

The model predicted that the perceived level of eye contact would have a significant effect on informativeness. The results support this prediction, showing a significant negative effect on informativeness when eye contact was absent ($a_1 = -0.23, t = -2.18, p < .05$), whereby participants in the no-eye-contact condition rated the information as less informative than those in the eye-contact condition. Informativeness, in turn, was positively related to willingness to sponsor ($b_1 = 1.44, t = 4.87, p < .001$).

The interaction between informativeness and self-monitoring ($M \times W$) was significant ($Int_1 = -0.13, t = -2.47, p < .05$), indicating that the positive effect of informativeness on willingness to sponsor was attenuated as self-monitoring increased. Conditional effects analysis showed that informativeness significantly predicted the willingness to sponsor at all levels of self-monitoring, but the effect decreased from low (effect = 0.83, 95% CI $[0.69, 0.98]$) to high (effect = 0.62, 95% CI $[0.47, 0.76]$) self-monitoring.

The direct effect (c') of the no-eye contact condition on the willingness to sponsor was not significant ($B = 0.01, t = 0.13, 95\% \text{ CI } [-0.19, 0.21]$). However, the conditional indirect effects through informativeness were significant at all levels of self-monitoring, ranging from -0.19 (95% CI $[-0.39, -0.02]$) at low self-monitoring to -0.14 (95% CI $[-0.27, -0.02]$) at high self-monitoring. The index of moderated mediation was significant (index = 0.03, 95% CI $[0.001, 0.095]$), supporting the hypothesis that self-monitoring moderates the indirect effect of eye contact on respondents' willingness to sponsor via informativeness.

Implications

Our analysis suggests that sales experiences in video-mediated settings may be enhanced by a salesperson's attention to the camera's position and effort to direct their gaze to it more often during their conversations with a potential buyer. To achieve that, presenters must overcome their natural tendency to make eye contact with the face they see on their screen and instead deliberately find out where their camera is and look into it frequently. Benefits may include smoother exchange of information between parties, more positive emotional responses from the buyer, and ultimately better outcomes stemming from an increased likelihood of reaching an agreement.

Since acting counter to their intuitive impulses may be difficult for many, the documented effects also reinforce the importance of designing video-conferencing devices and interfaces which enhance perceptions of eye contact by minimizing the angle between the viewing direction of a user and their video monitor's camera's optical

axis, thus allowing participants in video-mediated interactions to maintain mutual gaze while also receiving non-verbal cues from the other party's facial expressions, making the video-mediated conversation an experience as close to a face-to-face meeting as possible.

The proposed research will also be applicable to the area of sales training where role plays are the main tool (Robinson 1987). Since at times almost half of the interactions between B2B clients and suppliers are taking place remotely (Bages-Amat et al. 2020), it is important to incorporate insights from research on mutual gaze dynamics in the video medium in any mock role play exercises that are part of sales training programs in order to prepare salespeople better for what seems to be the new normal in professional sales.

References

- Arndt, A. D., Khoshghadam, L., & Evans, K. (2020). Who do I look at? Mutual gaze in triadic sales encounters. *Journal of Business Research*, 111, 91-101. <https://doi.org/10.1016/j.jbusres.2019.02.023>
- Bages-Amat, A., Harrison, L., Spillecke, D., & Stanley, J. (2020). How COVID-19 has changed B2B sales forever. *McKinsey Insights*, Oct. 14, 2020. <https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/these-eight-charts-show-how-covid-19-has-changed-b2b-sales-forever>
- Bohannon, L. S., Herbert, A. M., Pelz, J. B., & Rantanen, E. M. (2013). Eye contact and video-mediated communication: A review. *Displays*, 34(2), 177-185.
- Burgoon, J. K., & Le Poire, B. A. (1999). Nonverbal cues and interpersonal judgments: participant and observer perceptions of intimacy, dominance, composure, and formality. *Communication Monographs*, 66(2), 105-124.
- Conty, L., George, N., & Hietanen, J. K. (2016). Watching eyes effects: When others meet the self. *Consciousness and Cognition*, 45, 184-197.
- Fullwood, C. & Morris, N. (2013). Like what you see? The effect of video-mediated gazing on information recall and impression. *Electronic Journal of Communication*, 23(1&2).
- Grondin, F., Lomanowska, A. M., Bekes, V., & Jackson, P. L. (2020). A methodology to improve eye contact in telepsychotherapy via videoconferencing with considerations for psychological distance. *Counselling Psychology Quarterly*. 1-14.
- Hayes, A. F. (2022). Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach (Vol. 3). New York, NY: Guilford Press.
- Hietanen, J. K., Leppanen, J. M., Peltola, M. J., Linna-aho, K., & Ruuhiala, H. (2008). Seeing direct and averted gaze activates the approach-avoidance motivational brain systems. *Neuropsychologia*, 46(9), 2423-2430.
- Inks, S., Barber, K., Loe, T. W., & Forbes, L. P. (2020). Running with your hair on fire: Lessons learned from transitioning a national university sales competition from face-to-face to virtual in 16 Days. *Journal of Marketing Education*, 42(3), 257-271. <https://doi.org/10.1177/0273475320950015>
- Jaklic, A., Solina, F., & Sain, L. (2017). User interface for a better eye contact in videoconferencing. *Displays*, 46, 25-36.
- Leeds, D. (1992). Increase sales without saying a word. *National Underwriter (Life/Health/Financial Services)*, 7 September, 45-46.
- Lieberman, M. (2020). Zoom use skyrockets during coronavirus pandemic, prompting wave of problems for schools. *Education Week*, <https://www.edweek.org/technology/zoom-use-skyrockets-during-coronavirus-pandemic-prompting-wave-of-problems-for-schools/2020/04>. Retrieved Oct. 7, 2022.

- Peterson, R. T. (2005). An examination of the relative effectiveness of training in nonverbal communication: Personal selling implications. *Journal of Marketing Education*, 27(2), 143-150.
<https://doi.org/10.1177/0273475305276627>
- Qin, Y., Lien, K.-C., Turk, M., & Höllerer, T. (2015). Eye gaze correction with a single webcam based on eye-replacement,” In *Advances in Visual Computing*, ISVC 2015. Lecture Notes in Computer Science, vol 9474. Springer, Cham. https://doi.org/10.1007/978-3-319-27857-5_54
- Redcay, E., & Schilbach, L. (2019). Using second-person neuroscience to elucidate the mechanisms of social interaction. *Nature Reviews Neuroscience*, 20(8), 495-505. <https://doi.org/10.1038/s41583-019-0179-4>
- Robinson, L. J. B. (1987). Role playing as a sales training tool. *Harvard Business Review*, May, <https://hbr.org/1987/05/role-playing-as-a-sales-training-tool>.
- Schilbach, L., Wohlschlaeger, A. M., Kraemer, N. C., Newen, A., Shah, N. J., Fink, G. R., & Vogeley, K. (2006). Being with virtual others: Neural correlates of social interaction. *Neuropsychologia*, 44(5), 718-730.
<https://doi.org/10.1016/j.neuropsychologia.2005.07.017>
- Sodikoff, C. L., Firestone, I. J., & Kaplan, K. J. (1974). Distance matching and distance equilibrium in the interview dyad. *Personality and Social Psychology Bulletin*, 1(1), 243-245.
- To, R. N., & Patrick, V. M. (2021). How the eyes connect to the heart: The influence of eye gaze direction on advertising effectiveness. *Journal of Consumer Research*, 48(1), 123–146.
- Xu, W., Cao, Y., & Chen, R. (2024). A multimodal analytics framework for product sales prediction with the reputation of anchors in live streaming e-commerce. *Decision Support Systems*, 177.
<https://doi.org/10.1016/j.dss.2023.114104>

SESSION 12.1: BRANDING THROUGH LIVED EXPERIENCE

Moderators:

Tian Li

Summary Brief

Exploring Life History Method to Understand Brand Management Over Time

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Abstract

This research explores the application of the life history analysis method to understand managing brands over time. Research so far has often compartmentalised the study of brands, focusing separately on tactics, contemporary strategies, or cross-sectional studies bound within set timeframes. However, there is a significant lacuna in understanding the continuum of brand stewardship, especially as shaped by the lived experiences, backgrounds, and decision-making paradigms of brand managers themselves. This research posits that a biographical or life history approach offers a multidimensional vantage point to study brands, providing an integrated framework to analyse how different internal and external forces interact over extended periods to shape brand trajectories. The idea of this paper emerged from a master's level elective course that the author had introduced to understand managing brands over time.

Purpose of the research

This study investigates the application of the life history analysis method, as conceptualised by Peterson and McQuitty (2001), to understand the multifaceted connectivity between various business functions, particularly marketing, and the longitudinal management of brands. Traditional research has often compartmentalised the study of brands, focusing separately on tactics, contemporary strategies, or cross-sectional studies bound within set timeframes. However, there is a significant lacuna in understanding the continuum of brand stewardship, especially as shaped by the lived experiences, backgrounds, and decision-making paradigms of brand managers themselves. This research aims to provide an integrated framework to analyse how different internal and external forces interact over extended periods to shape brand trajectories.

The contemporary marketplace is characterised by its hyper-dynamism, resulting from technological disruptions, evolving consumer expectations, globalisation, networked ecosystems, and increasingly complex regulatory environments. Managing brands in this ever-changing landscape is more challenging than at any previous point in business history. Brands today face not only the relentless pressures of competition and innovation but must also continuously adapt to rapid shifts in cultural norms, marketing communications channels, and digital touchpoints. Within this context, both external and internal forces converge in intricate ways, collectively influencing a brand's journey. While external factors such as regulatory shifts, customer behaviour trends, technological advancements, and competitive pressures often dictate the pace and direction of change, it is the internal environment—comprising leadership philosophies, organizational culture, resource allocations, structural dynamics, and above all, the vision and skill of individual managers—that ultimately guides the brand's developmental path.

Approach to conducting the research

This research advocates for the utilisation of the life history method as an unconventional yet powerful pedagogical approach in management studies and brand research. A form of in-depth biographical analysis, the life history method enables a holistic examination of brand histories through the perspectives, experiences, and strategies of the people tasked with managing them. By foregrounding the lived realities of brand managers—those individuals whose insight, resilience, and ingenuity animate the brand's narrative—this research seeks to shift the discourse from existing theorisation to grounded, actionable knowledge. Life history analysis provides not only a chronological account of managerial careers but also surfaces the interconnectedness of personal and professional trajectories, revealing how formative experiences in childhood, higher education, and early career stages crystallise into unique managerial competencies and enduring philosophies of practice.

Each case study conducted as part of this research will involve a comprehensive, detailed written commentary. These commentaries will be designed to present holistic biographies that capture both the personal and professional evolution of each subject—moving beyond milestones to interrogate pivotal background factors,

defining life events, and influential relationships. The research will engage with questions such as: How have foundational family values or early community contexts shaped a manager's worldview? Which educational experiences—formal or informal—have contributed most substantively to skill acquisition, critical thinking, and strategic dexterity? In what ways have moments of adversity, career inflexion points, or transformative mentorships influenced long-term approaches to leadership and decision-making?

Central to the research is the identification and analysis of the strategies, operational tactics, and core management philosophies that have underpinned brand stewardship and contributed to long-term brand vitality. This investigative approach will examine both tangible and intangible dimensions, considering not only the tactical decision-making processes that drive brand positioning, awareness, and equity, but also the often-unspoken philosophical underpinnings—belief systems, value hierarchies, and personal principles—that inform everyday choices and long-term strategies. Specific attention will be paid to how managers navigate periods of crisis or transition, leverage opportunities arising from market disruptions, and balance the tension between short-term performance and long-term brand-building requirements.

This research will also explore the recursive influence of various contextual factors at different career stages. For example, the inquiry will consider how early career experiences in diverse functional areas (such as sales, operations, or product development) contribute to the development of broad-based managerial competence. It will examine the extent to which managers draw upon interdisciplinary knowledge or cross-functional collaboration to address complex branding challenges. Furthermore, the study seeks to distil actionable insights for future practitioners, asking: What are the replicable dimensions of personal and professional growth that foster brand leadership resilience across sectors and contexts? Which practices and mindsets are most predictive of sustained success in brand management, especially amid uncertainty and rapid change?

Methodologically, synthesising multiple life histories allows for the construction of a composite profile of marketing practitioners, illuminating commonalities as well as distinct trajectories. Through qualitative analysis, this research aims to develop a taxonomy of factors most consequential to long-term brand-building: from early life experiences and the cultivation of adaptive leadership styles to the deployment of innovative strategies amid shifting organisational realities. The implications extend not only to marketing scholarship offering a fresh lens for theorising about brands and branding, but also to management education, where narrative-driven, biographically anchored learning can deepen the practical understanding required for effective brand stewardship.

Sample Reference

Peterson, R. T., & McQuitty, S. (2001). An Assessment of the Effectiveness of Life History Analysis in the MBA Marketing Management Class. *Marketing Education Review*, 11(2), 53–61.
<https://doi.org/10.1080/10528008.2001.11488747>

Summary Brief

You May Not Speak of Me, But I Still Tell a Story: How Funeral Urn Brands Use Cross-Cultural Storytelling to Connect with the Living

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As building rapport with customers becomes increasingly crucial for marketers, this study investigates the advertising of funeral urns, a death-related and culturally sensitive product. This research examines how Chinese and American funeral urn brands engage local consumers through culturally resonant storytelling strategies. Using a comparative qualitative case study approach, we analyze six advertisements through thematic analysis, focusing on seven dimensions: narrative structure, emotional framing, cultural anchoring, visual symbolism, brand tone, product positioning, and call to action. The findings reveal that Chinese brands emphasize relational continuity and symbolic emotional expression, while American brands focus on celebrating individual life stories with direct emotional appeals. This study contributes to the literature on brand storytelling and cross-cultural consumer behavior by demonstrating how culturally tailored narratives are employed across different cultures, even when marketing the same type of product. Managerial implications and future research directions are also discussed.

Introduction

In today's emotionally complex and globalized marketplace, storytelling has become a vital branding strategy for building emotional connections, shaping identity, and fostering loyalty; however, most existing research centers on everyday products, leaving a gap in understanding how storytelling operates in death-related markets. Funeral urns, being emotionally symbolic and culturally significant, require marketing that balances emotional resonance, cultural sensitivity, and ethical responsibility. This study investigates how funeral urn brands in China and the United States employ culturally tailored storytelling to shape brand narratives and consumer perception.

Background

Existing research focuses on storytelling in everyday market offerings, such as using storytelling to promote ugly produce consumption (Pai et al., 2025), to enhance consumers' positive attitude and word-of-mouth intentions towards fast-moving consumer goods (Solja et al., 2018), or to facilitate student engagement (Spanjaard et al., 2023). Little is known about how brands use storytelling in death-related market offerings, such as funeral urns, coffins, funeral services, life insurance plans. Therefore, this study focuses on the storytelling marketing of funeral urns. Drawing on Hall's (1976) theory of high- and low-context cultures, this study examines how funeral urn brands in China and the United States adapt storytelling strategies to align with cultural communication norms.

Key Findings

Using a comparative qualitative case study approach, this research analyzes six funeral urn brands from China and the U.S. through a discourse-analytic framework encompassing seven dimensions: narrative structure, emotional framing, cultural anchoring, visual symbolism, brand tone, product positioning, and call-to-action strategy (Braun & Clarke, 2006; Van Leeuwen, 2008). The results show that cultural context that's specifically high-context versus low-context communication shapes the narrative strategies brands use. Specifically, Chinese (high-context) advertisements emphasize collective memory, relational continuity, and ritual symbolism, whereas American (low-context) brands highlight individuality, personal achievements, and direct emotional appeals. This study addresses a critical gap in cross-cultural and emotional branding literature and provides insights for culturally sensitive marketing in the underexplored domain of death-related products.

References

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.

Hall, Edward T. (1976) *Beyond culture*. Anchor Press.

Pai, C. Y., Young, K. Y., Liska, L. I., & Laverie, D. (2025). I know I am ugly, but please listen to my story first: An examination of how storytelling can impact consumers' valuation of unattractive produce. *Journal of Consumer Behaviour*, 24(1), 247-266.

Solja, E., Liljander, V., & Söderlund, M. (2018). Short brand stories on packaging: An examination of consumer responses. *Psychology & Marketing*, 35(4), 294-306.

Spanjaard, D., Garlin, F., & Mohammed, H. (2023). Tell me a story! Blending digital storytelling into marketing higher education for student engagement. *Journal of Marketing Education*, 45(2), 167-182.

Van Leeuwen, T. (2008). *Discourse and practice: New tools for critical discourse analysis*. Oxford University Press.

SESSION 12.2: FROM @ MENTIONS TO MOSS WALLS: FOMO, DESIGN, AND WILLINGNESS TO TRY AI

Moderators:

Ali Soltaninejad

Full Paper

When Mentions Backfire: How Branded@mentions Shape Perceived Manipulation and Engagement

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Brand-influencer collaborations are increasingly central to social media marketing strategies. For example, brands expect influencers to @mention their brand profile frequently in posts to maximize visibility and influence, while influencers request higher compensation for including additional “branded@mentions.” However, the topic of branded@mentions, where influencers tag a brand’s profile in their posts or tweets, has been underexplored in the marketing literature. To address this deficiency, we utilize a field study (data from influencers on X) and five consumer-based experiments to examine how branded@mentions influence consumers’ perceptions and downstream consequences within influencer posts. The findings reveal that using branded@mentions, compared to merely mentioning the brand name, increases consumers’ perceptions of manipulative intent. Although increasing the number of branded@mentions enhances perceptions of the brand’s linkability and accessibility, it also further heightens perceptions of manipulative intent, which in turn reduces user engagement. This effect is mitigated when consumers believe it is reasonable for influencers to consider their income, but these negative effects are amplified in posts referencing family ties, particularly female relatives.

Key Words: social media influencers, influencer marketing, content strategy, persuasion knowledge, @mentions, digital marketing strategies

Introduction

Influencer marketing is playing an increasingly critical role for brands and firms (Tian, 2024; Libai et al., 2025). In 2024, influencer marketing was estimated to account for \$24 billion in marketing investments, with 87% of brands incorporating it into their communication strategies (Dilday, 2023; Geyser, 2024). Whether the influencers are social media personalities or celebrities from other industries, they hold a central position in the social media landscape (Wu et al., 2022; Pan et al., 2024). A significant portion of their income stems from brand partnerships, where they are compensated for promoting products or services to their followers, often tagging the partnered brands with branded@mentions¹ (Shewale, 2024; Appel, 2020). For brands, influencers offer an invaluable opportunity to reach highly targeted audiences through trusted and authentic voices, amplifying brand visibility and driving consumer engagement in ways that traditional advertising often cannot (Lee and Fortuny, 2022; Khamis et al., 2017). Despite the growing prominence of influencer marketing and its benefits, numerous aspects of the brand-influencer dynamic remain underexplored, necessitating ongoing study of emerging topics.

Consumer engagement with influencer posts has been shown to be a key indicator of future consumer behavior (Valsesia et al., 2020; Xu and Liu, 2019). Prior research highlights that when influencers promote brands in their content, several factors impact consumer engagement, such as likes, shares, and comments (Unnava and Aravindakshan, 2021; Wies et al., 2023). In addition, engagement is a highly relevant performance indicator that advertisers and influencers seek to optimize (Leung et al., 2022). Studies indicate that alignment between an influencer’s persona, brand values, and audience interests builds trust and authenticity, leading to higher engagement (Belanche et al., 2021). Other factors shown to enhance social media engagement include high-quality visuals (Li and Xie, 2020), post readability (Pancer et al., 2019), timing of content (Zor et al., 2022), alignment with brand messaging (Leung et al., 2022), and the use of sensory language (Cascio et al., 2023). While prior research has included branded@mentions or general @mentions as control variables when modeling engagement outcomes (e.g., Karagür et al., 2022; Cao & Belo, 2023), these studies have primarily focused on disclosure effects and did not treat branded@mentions as a distinct focal construct. In contrast, the present research isolates branded@mentions as a central theoretical mechanism, directly theorizing and testing their impact on consumer perceptions of manipulative intent and subsequent engagement.

To address this gap, we examine how mentioning brands through branded@mentions affects follower engagement. Influencers commonly use the '@' symbol followed by a brand's username (e.g., @nike, @cocacola) to link directly to brand profiles, a practice known as branded@mentions (Leung et al., 2022; Yang et al., 2019). This differs from general @mentions, which tag any user and are often used for conversation or visibility (Brown, 2014). Prior studies have treated general @mentions as covariates with mixed findings on engagement (Valsesia et al., 2020; Seigner et al., 2023). Some work suggests that excessive @mentions reduce intimacy and engagement (Chung et al., 2023), and that inappropriate brand mentions can lead to disengagement (Villanova & Matherly, 2024). While these studies provide useful insights, they do not explicitly isolate branded@mentions as a focal construct. Our findings show that branded@mentions, especially when frequent, increase perceptions of manipulative intent, which in turn reduces engagement. However, providing a transparent explanation mitigates these effects, while references to family members (especially females) amplify them.

This research makes several key contributions. First, it examines how both the number of brand@mentions and the format of mentions (brand name vs. branded@mention) affect engagement. While prior work has treated @mentions as covariates (Valsesia et al., 2020; Chung et al., 2023) or combined brand names and handles (Villanova and Matherly, 2024), this study isolates branded@mentions as a distinct factor. Findings show that both higher frequency and the use of branded@mentions (versus brand names) increase perceptions of manipulative intent, which reduces engagement. Second, this research extends the literature on influencer-brand collaboration (Leung et al., 2022; Valsesia et al., 2020) by demonstrating that providing a clear and transparent explanation about the advertising purpose can mitigate these negative effects. Specifically, such explanations reduce perceptions of manipulative intent, ultimately enhancing both engagement and persuasiveness. Third, the research identifies family-related mentions as a key moderator. Although family ties can boost engagement in some contexts (Chung et al., 2023), when combined with branded@mentions (especially female-related ties) they amplify the negative effect of manipulative intent on engagement. These insights offer practical guidance for influencers and brands seeking to manage branded@mention strategies more effectively.

Conceptual Background

Engagement Strategies in Influencer Marketing

Engagement, often measured by likes, shares, and comments, is essential for influencers and brands because it predicts consumer behavior and supports marketing goals (Cascio et al., 2023; Harmeling et al., 2017; Xu and Liu, 2019). Research has identified several drivers of engagement, including persona-brand fit, visual quality, post readability, timing, and sensory language (Belanche et al., 2021; Li and Xie, 2020; Pancer et al., 2019; Zor et al., 2022).

This paper focuses on branded@mentions, such as tagging @nike, which remain underexplored compared to brand name mentions (e.g., "Nike") or general @mentions used for social interaction (e.g., @calarsenault). Previous work has mostly treated @mentions as control variables and reported mixed findings on their impact (Karagür et al., 2022; Cao and Belo, 2022; Chung et al., 2023; Berendt et al., 2024). Unlike Villanova and Matherly (2024), who grouped different mention types together, we isolate branded@mentions and examine their specific effects on engagement and perceived manipulative intent.

A pretest (see Web Appendix A1 to A3) confirmed that branded@mentions enhance brand visibility through increased perceptions of prominence, accessibility, and linkability. However, they also heighten perceptions of promotional intent. This tension between brand benefit and consumer skepticism motivates the present research.

Theoretical and Hypotheses Development

The Effects of Branded@mentions on Engagement

Branded@mentions function much like product placements by embedding promotional cues within influencer content (Leung et al., 2022; Jonca, 2024). As with traditional placements, however, more overt promotional tactics can activate consumers' persuasion knowledge (Friestad and Wright, 1994), prompting them to view the content as manipulative and less authentic. According to the Persuasion Knowledge Model (PKM), consumers recognize and respond defensively to perceived persuasion attempts, especially when these attempts appear covert or overly commercial (Kirmani and Zhu, 2007; Eisend and Tarrahi, 2022). This defensive processing is reflected in increased inferences of manipulative intent (IMI), which can ultimately reduce consumer engagement (Chen and Kirmani, 2015; Singh et al., 2020).

Building on this perspective, one factor that may intensify these effects is the frequency of branded@mentions within a post. Influencers often include multiple branded@mentions to improve brand visibility and accessibility, but this repeated exposure may increase the salience of promotional intent. Similar to the cumulative effects of repeated product placements (Wang et al., 2022), repeated tagging of a brand can increase the likelihood that followers detect an underlying persuasive motive. As consumers recognize the pattern, they may become more skeptical and attribute greater manipulative intent to the influencer's message. Therefore, we predict that increasing the number of branded@mentions will elevate inferences of manipulative intent.

Formally:

H1: A higher number of branded@mentions will increase consumers' inference of manipulative intent (IMI).

In addition to frequency, the format in which a brand is referenced may also shape consumers' perceptions. Branded@mentions that directly tag the brand's profile (such as @nike) are more visually prominent and functionally interactive than simple textual brand name mentions. These tags serve as clickable links to the brand's profile, thereby increasing the salience of the commercial association (Leung et al., 2022; Jonca, 2024). From the perspective of the PKM, this explicit linking may be interpreted as a strong promotional cue, increasing consumers' persuasion knowledge activation (Kirmani and Zhu, 2007). Prior work shows that such overt signals, including sponsorship labels and disclosure cues, consistently raise perceptions of manipulative intent (Boerman et al., 2017; Chen and Kirmani, 2015; Singh et al., 2020). As a result, we expect that branded@mentions will elicit higher IMI compared to brand name mentions.

Formally:

H2: Branded@mentions will increase consumers' inference of manipulative intent (IMI) more than brand name mentions.

To build upon the discussion of IMI, it is essential to explore how this perception affects user engagement. When consumers perceive content as overly commercial or manipulative, they tend to adopt defensive attitudes, which directly impact their willingness to engage with the content (Mukherjee et al., 2022). Prior literature consistently shows that manipulative intent negatively impacts user behavior. For example, Lunardo and Roux (2015) found that high-arousal environments, which are often designed to capture attention, can backfire if users infer manipulative intent, resulting in decreased pleasure and approach behaviors. This suggests that while the intention may be to increase engagement, the perception of manipulation can lead to disengagement. Moreover, Mukherjee et al. (2022) demonstrated that content perceived as manipulative, such as clickbait, often leads to source derogation, where the publisher is seen as less credible or trustworthy. This perception of manipulative intent results in lower engagement, as users are less likely to interact with content they view as deceptive (Mukherjee et al., 2022).

In line with this, increased IMI would result in decreased engagement as consumers become less inclined to support content they view as manipulative (Mukherjee et al., 2022). Additionally, IMI is expected to mediate the relationship between the number of branded@mentions and engagement, as higher numbers of branded@mentions may increase the inference that the content is manipulative, leading to reduced engagement.

Formally:

H3: An increase in the inference of manipulative intent (IMI) will decrease user engagement.

H4: The inference of manipulative intent (IMI) will mediate the effect of the number of branded@mentions on engagement.

The Moderating Role of Providing a Transparent Explanation

Thus far, we hypothesize that branded@mentions increase perceptions of manipulative intent (IMI), thereby negatively impacting follower engagement. Now, we shift focus to potential strategies and remedies to mitigate these negative effects. Influencer marketing often involves subtle advertising cues, such as branded@mentions, that trigger consumers' persuasion knowledge and enhance perceptions of manipulative intent (IMI). According to the Persuasion Knowledge Model (PKM; Friestad and Wright, 1994), consumers rely on persuasion knowledge to interpret and cope with marketing tactics once they recognize persuasive intent. Consequently, branded@mentions can lead followers to perceive manipulative motives, reducing engagement

(Darke and Ritchie, 2007). However, research indicates that transparent explanations about advertising motives behind content can mitigate negative effects by reducing skepticism and restoring perceptions of fairness and authenticity (Boerman et al., 2017; Wojdyski, 2016). For example, Boerman et al. (2017) demonstrate that clear disclosures of sponsorships in social media posts enhance consumer reactions by making commercial intent transparent. Similarly, Wojdyski (2016) finds that explicit disclosures in native advertising decrease perceived deceptiveness.

Moreover, Daniels and Wu (2024) found that negative consumer reactions toward influencers can be mitigated when the audience believes it is reasonable for influencers to prioritize their self-interest, such as income or mental well-being. Drawing from their findings, we propose that providing a simple, reasonable explanation (e.g., stating that advertising supports content creation or influencer livelihood) reframes branded@mentions from manipulative to supportive (Shen et al., 2025; Evans et al., 2019). This transparency aligns followers' expectations with commercial realities, reducing resistance and preserving engagement by dampening heightened IMI. Formally we hypothesize:

H5: Providing a transparent explanation about advertising will reduce the negative effect of branded@mentions on perceived manipulative intent (IMI).

The Moderating Effect of Mentioning Family Ties

Influencers often reference family ties to enhance authenticity and relatability (Chung et al., 2023). While such references humanize content, they may also serve strategic purposes when paired with branded messages. Drawing on the Persuasion Knowledge Model (PKM; Friestad and Wright, 1994), research on emotional manipulation (Aaker et al., 1999) and growing concern about using family (De Veirman et al., 2019), we suggest family references can heighten perceptions of manipulative intent (IMI) when combined with branded@mentions.

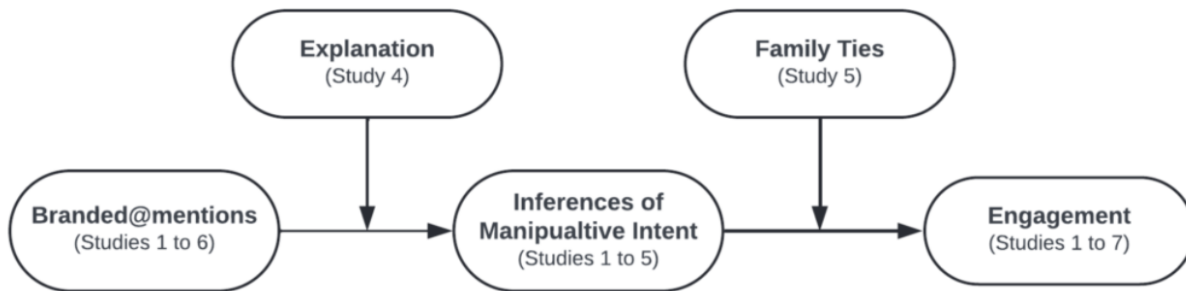
PKM posits that when consumers detect attempts to influence them, they become more critical and defensive (Friestad and Wright, 1994). Family mentions are typically perceived as sincere (Chung et al., 2023), but when paired with overtly commercial content, this contrast may activate persuasion knowledge and heighten IMI. In this context, followers may view family mentions as strategic efforts to enhance credibility, which increases skepticism and reduces engagement.

Emotional manipulation further explains this effect: when emotional appeals feel calculated, consumers respond with greater resistance (Kidwell et al., 2011; Mukherjee et al., 2022). Family references, especially when perceived as insincere within branded content, can exacerbate these perceptions. Moreover, the gender of the mentioned family member may influence this effect. Female relatives (e.g., sisters) are stereotypically viewed as more emotionally expressive (Eagly and Karau, 2002), making such references appear more emotionally charged and, thus, more strategic. As a result, mentioning a sister is more likely to amplify perceptions of manipulative intent than mentioning a brother or no family member at all (Abdul-Ghani et al., 2022). Thus, family mentions, particularly female ones, can intensify the negative impact of IMI on engagement.

Formally, we hypothesize:

H6: The inclusion of family-related mentions moderates the negative effect of inferences of manipulative intent (IMI) on engagement, such that the effect will be stronger when a sister is mentioned compared to a brother or no family.

Figure 1. Conceptual Model



Overview of Studies

The current research includes five experiments and one field study to examine how branded@mentions influence user engagement and perceptions of manipulative intent (IMI). The studies systematically explore the roles of mention frequency, mention type (brand name vs. branded@mention), advertising transparency, and family-related references as boundary conditions. Please refer to table 1a in web appendix B for overview of the studies.

Study 1

The objective of Study 1 was to investigate how varying the number of branded@mentions in a social media post influences consumers' perceptions of manipulative intent (IMI) and their subsequent engagement with the content. Specifically, the study aimed to determine whether an increase in branded@mentions leads to higher perceived manipulative intent, which in turn reduces engagement (e.g., likes, comments, shares). Additionally, the study tested whether perceived manipulative intent serves as a mediator in the relationship between the number of branded@mentions and engagement. Finally, the study explored whether the negative effect of increasing branded@mentions on IMI and engagement reaches a saturation point, suggesting that after a certain number of mentions, the effect plateaus or no longer increases significantly.

Method

A total of 700 participants were recruited via Prolific. After excluding those who failed an attention check ("What is the color of the ocean?") and screening out non-Instagram users (see Web Appendix C), 652 Instagram users remained (Mage = 34; Male 36%, Female 60%; White 59%, Black 30%). Participants reported high Instagram usage in both duration (M = 6.90/7) and frequency (M = 6.84/7). This study is pre-registered at <https://aspredicted.org/3pkd-67f8.pdf>.

Participants were randomly assigned to one of seven Instagram post conditions varying in how the brand Frutigo was referenced: (1) no brand mention, (2) brand name only without the @, or (3–7) one to five branded@mentions. All other post elements were identical across conditions (see Appendix B2 for scenarios). After viewing the post, participants completed measures of engagement intentions (we computed an engagement index by averaging participants' responses to three behavioral intentions: Intention to like, comment, share; (Valsesia et al., 2020); $\alpha = .92$) and inferences of manipulative intent (IMI; Matthes et al., 2011; $\alpha = .84$). Manipulation checks and demographics were also collected (See Web Appendix C for manipulation check items and results; For scales and items refer to Table 5a in the web appendix D).

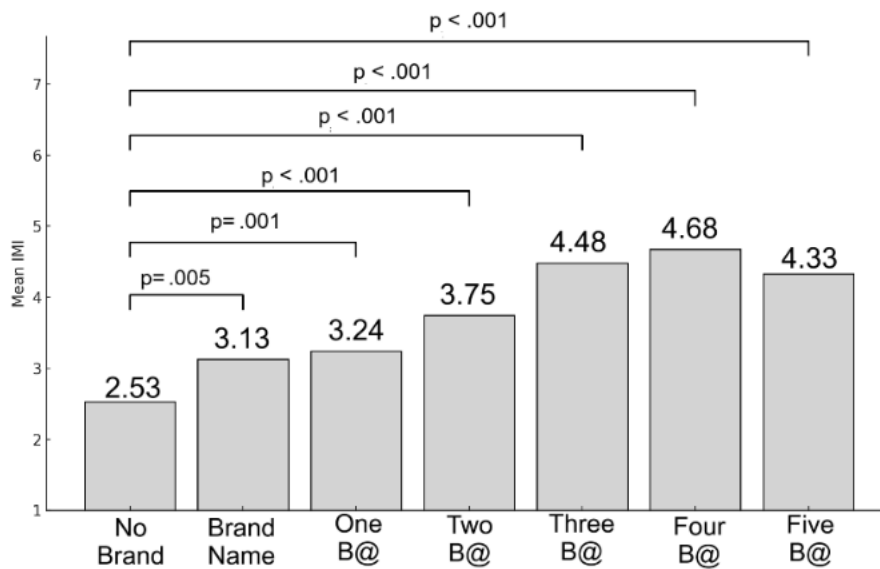
Results

A one-way ANOVA tested the effect of the number of branded@mentions (ranging from 0 to 52) on perceived manipulative intent (IMI). The overall effect was significant ($F(5, 553) = 28.99, p < .001$), indicating that the frequency of branded@mentions influenced how manipulative participants perceived the post to be. Polynomial contrasts revealed a significant linear trend ($b = 1.68, SE = 0.15, 95\% CI [1.377, 1.984], p < .001$), suggesting that perceived manipulation increased as the number of branded@mentions increased. Additionally, a significant quadratic trend emerged ($b = -0.71, SE = 0.15, 95\% CI [-1.013, -0.408], p < .001$), indicating a curvilinear pattern whereby perceived manipulation rose more steeply at lower mention levels and began to level off beyond three branded@mentions. Higher-order trends were not significant. The cubic trend approached significance ($b = -0.29, SE$

= 0.15, 95% CI [-0.598, 0.009], $p = .057$), while the fourth-order and fifth-order contrasts were nonsignificant ($b = -0.09$, $SE = 0.15$, $p = .576$ and $b = 0.12$, $SE = 0.15$, $p = .426$, respectively). These findings suggest that the pattern of responses can be adequately captured with a quadratic model, with no need for additional inflection points.

Pairwise comparisons further clarified the nature of this pattern (See figure 2). Perceived manipulative intent significantly increased between no brand mentions ($M = 2.53$, $SE = .15$) and 1 branded@mention ($M = 3.24$, $SE = .16$; $p < .001$), between 1 and 2 branded@mention ($M = 3.75$, $SE = 0.15$; $p = .022$), and between 2 and 3 branded@mentions ($M = 4.48$, $SE = 0.15$; $p < .001$). However, differences between 3 branded@mentions ($M = 4.48$), 4 branded@mentions ($M = 4.68$, $SE = 0.15$), and 5 branded@mentions ($M = 4.33$, $SE = 0.16$) were not statistically significant (all $ps > .115$), suggesting a leveling-off effect in perceived manipulation at higher branded@mention frequencies. Overall, these results support the theorized saturation or wear-out effect, in which the persuasive impact of branded@mentions increases up to a point but does not continue to rise indefinitely (see Web Appendix C for descriptives and full pairwise comparisons).

Figure 2. IMI comparison with No-brand



To formally test this hypothesized plateau, we conducted a segmented regression analysis with a breakpoint at three branded@mention. This approach allowed us to examine whether the slope of IMI changes significantly after this point. Two predictors were entered into the model: a linear segment representing the number of branded@mention from 0 to 3 (mention_linear) and a segment capturing additional mentions beyond 3 (mention_post3). The overall model was significant ($F(2, 556) = 71.09$, $p < .001$), explaining 20.4% of the variance in IMI ($R^2 = .204$). Results indicated a significant positive relationship between mentions from 0 to 3 and perceived manipulation ($b = 0.665$, $SE = 0.066$, $t = 10.08$, $p < .001$), but no significant slope beyond three branded@mention ($b = -0.043$, $SE = 0.100$, $t = -0.43$, $p = .668$). These findings support a saturation effect, where perceived manipulative intent increases with branded@mentions up to three, after which the effect plateaus. These results support H2.

A simple linear regression was conducted to examine whether perceived manipulative intent predicted engagement with the social media post. Perceived manipulative intent negatively predicted engagement ($b = -0.50$, $t = -10.56$, $p < .001$), supporting H3. Lastly, a PROCESS model 4 (Hayes 2018) was conducted to determine mediation. The IV was run as a continuous variable with no brand name set as 0. The analysis revealed a significant indirect effect of branded@mention on engagement through IMI ($ab = -.24$, 95% CI [-0.306, -0.184]), supporting H4. The direct effect of the number of mentions on engagement remained significant ($c' = 0.24$, $p < .001$), 95% CI:

[.145, .339]), possibly indicating another mediator that is not accounted for. Overall, these findings support the hypothesis that increasing the number of brand@mentions in a social media post heightens perceived manipulative intent, with diminishing returns beyond three branded@mentions. Additionally, higher perceptions of manipulation reduce consumer willingness to engage with branded content.

Discussion

Study 1 shows that increasing the number of branded@mentions raises perceptions of manipulative intent, which in turn lowers engagement. However, this effect levels off after three mentions, suggesting a saturation point where additional tags no longer increase perceived manipulation. Mediation analysis confirms that manipulative intent explains the negative link between mention frequency and engagement. These findings highlight the psychological cost of excessive tagging and suggest that using more than three branded@mentions may offer limited benefit while reducing user engagement.

Study 2

The primary goal of this study was to examine how the format of brand references (branded@mentions versus plain brand names) shapes consumers' perceptions of manipulative intent (IMI) and engagement intentions. Specifically, the study aimed to test whether branded@mentions elicit higher perceptions of manipulative intent than brand name mentions. This study is pre-registered at <https://aspredicted.org/vrrn-b6w9.pdf>.

Method

A total of 400 participants were recruited via Prolific. After excluding those who failed an attention check ("What is the color of the ocean?"), 381 participants remained (Mage = 29.55; Male 27%, Female 68%; White 62%, Black 16%). Participants reported high Instagram usage in both duration ($M = 6.98/7$) and frequency ($M = 6.82/7$).

The study employed a between-subjects design comparing the format of brand references (brand name vs. branded@mention) at two levels of frequency: one mention and three mentions. Participants were randomly assigned to one of four conditions: (1) one brand name, (2) one branded@mention, (3) three brand names, or (4) three branded@mentions (see Web Appendix E for conditions). Afterward, participants rated engagement intentions (we computed an engagement index by averaging participants' responses to three behavioral intentions: Intention to like, comment, and share; Valsesia et al., 2020; $\alpha = .83$), and perceived manipulative intent (IMI; Matthes et al., 2011; $\alpha = .85$). Manipulation checks (See Web Appendix E) and demographics were also collected (For scales and items refer to Table 5a in web appendix D).

Results

One Branded@mention vs One Brand Name. To test whether a single branded@mention elicits higher perceived manipulative intent (IMI) than a single brand name mention, we conducted a one-way ANOVA among participants who saw only one brand reference. The results revealed a significant effect of mention type, $F(1, 187) = 5.55$, $p = .020$, $\eta^2 = .029$. Participants exposed to one branded@mention reported significantly higher perceived manipulative intent ($M = 3.58$, $SD = 1.42$) compared to those who saw one brand name mention ($M = 3.07$, $SD = 1.55$). These results support the hypothesis 2 that even a single branded@mention increases perceptions of manipulative intent relative to plain brand name mentions (See figure 3).

To test whether the effect of branded@mention format (vs. brand name) on engagement is mediated by perceived manipulative intent (IMI), we conducted a mediation analysis using PROCESS Model 4 (Hayes, 2018). The independent variable was mention type (0 = brand name, 1 = branded@mention), IMI served as the mediator, and engagement was the dependent variable. This analysis included participants who were exposed to one brand reference only ($N = 189$).

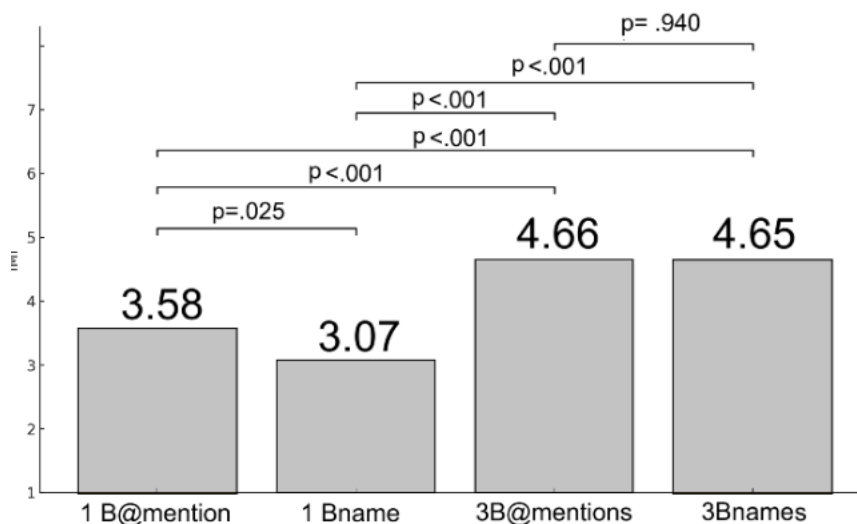
Mention type significantly influenced IMI, $F(1, 187) = 5.55$, $p = .020$, $R^2 = .029$. Participants who viewed a branded@mention reported higher manipulative intent ($M = 3.58$) than those who saw a brand name mention ($M = 3.07$). The effect of mention type on IMI was significant, $b = 0.51$, $SE = 0.22$, $t = 2.36$, $p = .020$, 95% CI [0.082, 0.935]. In the second stage of the model, IMI significantly predicted lower engagement, $b = -0.28$, $SE = 0.06$, $t = -4.27$, $p < .001$, 95% CI [-0.409, -0.150]. However, the direct effect of mention type on engagement was not significant, $b = 0.07$, $SE = 0.19$, $t = 0.36$, $p = .718$, 95% CI [-0.316, 0.459]. Bootstrapping procedures (5,000 samples) confirmed a significant indirect effect of mention type on engagement through IMI (indirect effect = -0.14, BootSE = 0.069, 95% CI [-0.292, -0.023]).

Three Branded@mention vs Three Brand Name. To examine whether branded@mentions increase perceived manipulative intent (IMI) compared to brand name mentions when the brand is referenced three times, we conducted a one-way ANOVA among participants exposed to three brand references. The effect of mention format (branded@mention vs. brand name) on IMI was not significant, $F(1, 190) = 0.01$, $p = .943$, $\eta^2 < .001$. Participants perceived three branded@mentions ($M = 4.65$, $SD = 1.60$) and three brand name mentions ($M = 4.66$, $SD = 1.65$) as equally manipulative (See figure 3).

To test whether the effect of mention format (branded@mention vs. brand name) on engagement is mediated by perceived manipulative intent (IMI) when the brand is referenced three times, we conducted a mediation analysis using PROCESS Model 4 (Hayes, 2022). The independent variable was mention type (0 = brand name, 1 = branded@mention), IMI was the mediator, and engagement was the dependent variable ($N = 192$). Mention type had no significant effect on perceived manipulative intent, $F(1, 190) = 0.01$, $p = .943$, $R^2 < .001$. Participants perceived three branded@mentions ($M = 4.65$) and three brand names ($M = 4.66$) as equally manipulative. The path from mention type to IMI was not significant, $b = -0.0168$, $SE = 0.2348$, $t = -0.07$, $p = .943$, 95% CI $[-0.480, 0.446]$. IMI significantly predicted engagement, $b = -0.4379$, $SE = 0.0572$, $t = -7.65$, $p < .001$, 95% CI $[-0.551, -0.325]$. However, the direct effect of mention type on engagement was not significant, $b = -0.2141$, $SE = 0.1853$, $t = -1.16$, $p = .249$, 95% CI $[-0.579, 0.151]$. Bootstrapped mediation analysis (5,000 samples) confirmed that the indirect effect of mention type on engagement via IMI was not significant (indirect effect = 0.00, BootSE = 0.10, 95% CI $[-0.194, 0.206]$).

Alternative explanation. To rule out perceived intrusiveness as an alternative explanation, we conducted a second mediation analysis using PROCESS Model 4 (Hayes, 2022), incorporating both perceived manipulative intent (IMI) and perceived intrusiveness as parallel mediators. This inclusion is theoretically grounded in prior research showing that intrusive advertising disrupts the user experience and elicits psychological reactance, which in turn diminishes engagement (Li et al., 2002; Wang and Calder, 2006). Intrusiveness was measured using six items adapted from Wang and Calder (2006): “distracting,” “disturbing,” “forced,” “interfering,” “intrusive,” and “obtrusive” (1 = Strongly disagree, 7 = Strongly agree). This analysis was conducted only in the condition where branded references appeared once, because the effect of branded@mention format on engagement through IMI was significant in that condition. As in the previous model, the indirect effect of a single branded@mention (vs. brand name) on engagement through IMI was significant (effect = -0.14 , BootSE = $.09$, 95% CI $[-0.354, -0.008]$). In contrast, the indirect effect through perceived intrusiveness was not significant (effect = -0.00 , BootSE = $.05$, 95% CI $[-0.106, 0.136]$), and the direct path from intrusiveness to engagement was also non-significant ($b = -0.00$, $SE = .1019$, $p = .986$).

Figure 3. IMI Pairwise comparison



Discussion

Study 2 shows that branded@mentions can increase perceived manipulative intent and lower engagement, but only when used once. A single branded@mention led to higher perceptions of manipulation than a plain brand name mention, and this perception mediated the negative effect on engagement. However, when brand references were repeated three times, the difference between branded@mentions and brand names disappeared, and no mediation occurred. To test whether this effect was due to perceived intrusiveness rather than manipulative intent, we included both as mediators in a follow-up analysis. The results showed that only manipulative intent explained the drop in engagement. Intrusiveness had no significant effect.

These findings suggest that low-frequency branded@mentions are especially likely to activate persuasion knowledge and reduce engagement, while repeated mentions may trigger similar skepticism regardless of format.

Study 3

This study uses a social media post formatted to resemble X (formerly Twitter) to test whether including more branded@mentions increases perceived manipulative intent (IMI) and reduces engagement intentions. Specifically, the study compares scenarios containing either one or four branded@mentions of a fictional brand. It also examines whether perceived manipulative intent mediates the effect of @mention frequency on engagement.

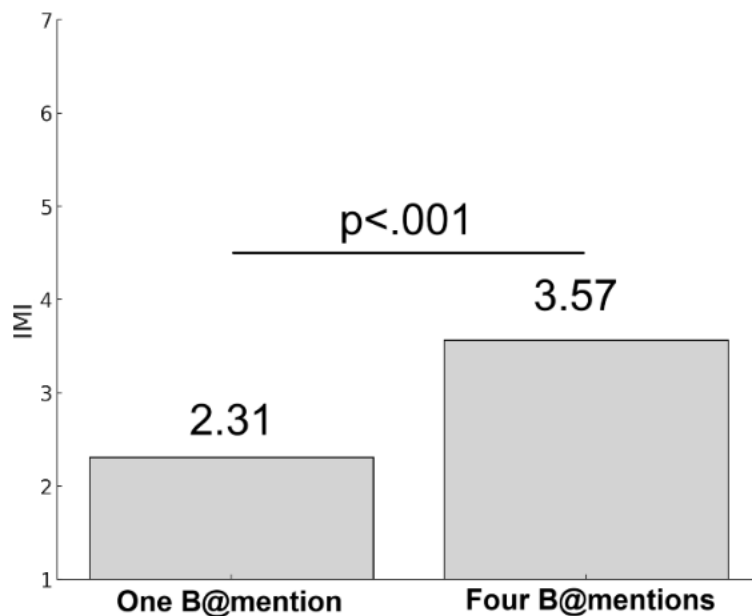
Method

We recruited 302 participants via Prolific. After excluding 24 who failed the attention check, 278 participants (Mage = 37; Male 43%, Female 55%; White 58%, Black 25%) remained for analysis. Participants reported high X usage ($M = 5.55/7$). Participants were randomly assigned to view a tweet with either one or four branded@mentions (see Web Appendix F for Pre-Test 2). After viewing the tweet, they reported their likelihood to engage (we computed an engagement index by averaging participants' responses to four behavioral intentions: Intention to like, comment, share, and retweet; Valsesia et al., 2020; $\alpha = .94$), overall impression (Daniels and Wu, 2024; $\alpha = .93$; see Table 5a for scales and items in web appendix D), and perceived manipulative intent (IMI; Matthes et al., 2011; $\alpha = .83$). Manipulation checks and demographics were also collected (see Web Appendix E).

Results

To examine how the frequency of branded@mentions affects perceived manipulative intent (IMI), we conducted a one-way ANOVA comparing the one branded@mention condition with the four branded@mentions condition. As provided in figure 6, The results revealed a significant effect of mention frequency on IMI ($F(1, 276) = 59.23, p < .001, \eta^2 = .177$). Participants exposed to four branded@mentions reported significantly higher manipulative intent ($M = 3.57, SD = 1.55$) than those who saw only one branded@mention ($M = 2.31, SD = 1.15$), supporting H2.

Figure 6. The effect of Branded@mention on IMI



To test whether perceived manipulative intent (IMI) influenced participants' willingness to engage with the content, we computed an engagement index by averaging participants' responses to four behavioral intentions: likes, comments, shares, and retweets. A linear regression revealed that IMI significantly and negatively predicted engagement ($B = -0.18$, $t = -2.72$, $p = .007$). Specifically, higher perceptions of manipulation were associated with lower reported likelihood of engaging with the post, supporting H3. IMI accounted for approximately 2.6% of the variance in engagement ($R^2 = .026$).

Lastly, a mediation analysis using PROCESS Model 4 (Hayes, 2018) was conducted to test whether perceived manipulative intent (IMI) mediated the effect of condition (1 branded@mention vs. 4 branded@mentions) on engagement. The analysis revealed a significant indirect effect of condition on engagement through IMI (indirect effect = -0.28 , 95% CI $[-0.471, -0.122]$). While the direct effect of condition on engagement was not significant ($c' = 0.34$, $p = .110$), the significant indirect effect suggests that the presence of multiple branded@mentions (four vs. one) led to lower engagement primarily by increasing perceptions of manipulative intent, supporting H4.

To further test the robustness of our findings, we examined whether perceived manipulative intent (IMI) also predicted participants' impression of the tweet. A linear regression revealed that IMI significantly and negatively predicted impressions ($b = -0.54$, $t = -8.91$, $p < .001$), such that higher perceived manipulation was associated with more negative evaluations of the tweet. IMI accounted for 22.4% of the variance in impression ($R^2 = .22$).

We conducted a mediation analysis using PROCESS Model 4 (Hayes, 2018), with condition (1 branded@mention vs. 4 branded@mentions) as the independent variable, impression of the tweet as the dependent variable, and perceived manipulative intent as the mediator. The model confirmed that condition significantly predicted perceived manipulative intent ($b = 1.26$, $p < .001$), such that participants exposed to four mentions perceived the post as more manipulative than those exposed to one. In turn, higher IMI significantly predicted more negative impressions of the tweet ($b = -0.58$, $p < .001$). The indirect effect of condition on impressions through IMI was significant (effect = -0.73 , 95% CI $[-1.000, -0.491]$), indicating robust mediation. The direct effect of condition on impression was not significant ($b = 0.31$, $p = .12$), suggesting full mediation through perceived manipulation.

These findings reinforce the conclusion that the negative effect of repeated branded@mentions on tweet impressions is driven by increases in perceived manipulative intent.

Discussion

Study 3 tested whether increasing the number of branded@mentions from one to four would elevate perceived manipulative intent and negatively affect consumer responses. Results showed that four branded@mentions significantly increased perceptions of manipulation compared to one branded@mention. This heightened manipulative intent, in turn, led to lower engagement and less favorable impressions of the post. Mediation analyses confirmed that perceived manipulative intent fully explained the negative effects of mention frequency on both engagement and impression.

Study 4

Objective

This study aims to examine whether providing a transparent and reasonable explanation about advertising in an influencer's profile can reduce the negative effects of branded@mentions on consumers' perceptions of manipulative intent, their intentions to engage with the post, and the perceived persuasiveness of the content (The study also seeks to replicate earlier findings using a new dependent variable).

Method

This study tested whether providing an explicit advertising explanation in an influencer's profile reduces the negative effects of multiple branded@mentions on perceived manipulative intent (IMI), engagement, and persuasiveness. Using a 2 (Explanation: Present vs. Absent) $\times$ 2 (Branded@Mentions: One vs. Four) design, 600 participants were recruited via Prolific. After excluding 27 for failing an attention check, 573 participants remained (Mage = 35; Male 40%, Female 57%; White 68%, Black 16%). Participants reported high Instagram usage ($M = 5.55/7$). This study is pre-registered at <https://aspredicted.org/bbsj-kbxb.pdf>.

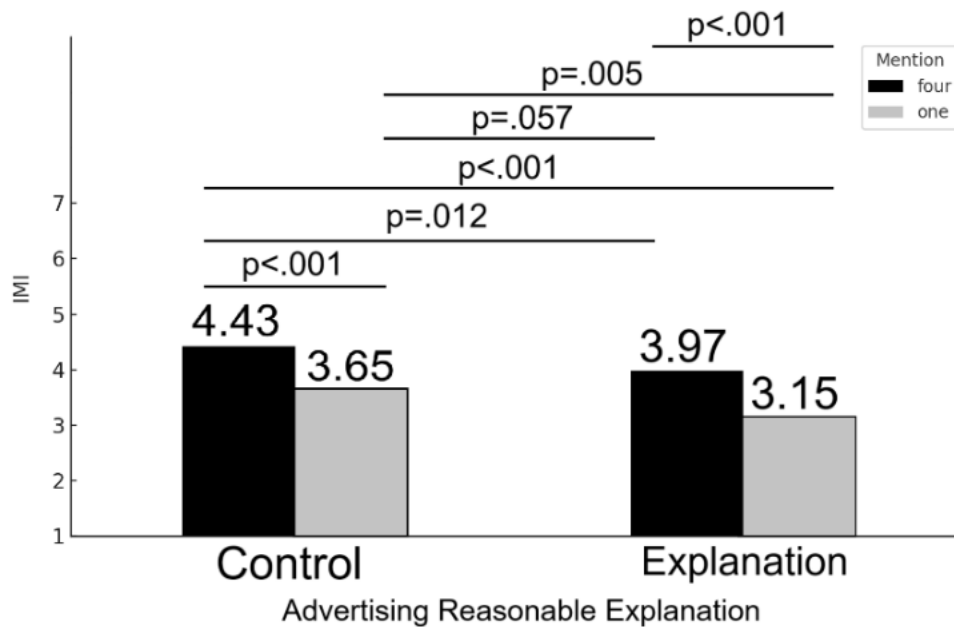
Participants were randomly assigned to view an Instagram profile for a fictional influencer, Caleb McKinney, who either included (vs. omitted) a reasonable explanation about advertising. After viewing the profile, participants saw a post by Caleb for a fictional coffee brand, Frutigo, featuring either one or four branded@mentions. All other post elements were held constant (see Web Appendix G for scenarios). Participants then completed measures of engagement (we computed an engagement index by averaging participants' responses to three behavioral intentions: Intention to like, comment, and share; $\alpha = .89$; Valsesia et al., 2020), persuasiveness ($\alpha = .97$; Daniels and Wu, 2024) and then manipulative intent (IMI; $\alpha = .83$; Matthes et al., 2011). Manipulation checks confirmed attention to the conditions (See Web Appendix G for manipulation check items and results).

Results

A one-way ANOVA was conducted to test the effect of branded@mention frequency (one vs. four) on perceived manipulative intent (IMI). The results revealed a significant effect of mention frequency on IMI, $F(1, 571) = 33.42$, $p < .001$. Participants exposed to four branded@mentions reported higher perceived manipulation ($M = 4.17$, $SD = 1.58$) than those exposed to just one ($M = 3.43$, $SD = 1.49$).

Then, a two-way ANOVA was conducted to examine the effects of mention type (brand name vs. branded@mention) and explanation presence (no explanation vs. explanation) on perceived manipulative intent (IMI). The analysis revealed a significant main effect of mention type, $F(1, 569) = 39.33$, $p < .001$, with branded@mentions ($M = 4.17$, $SD = 1.58$) eliciting higher perceived manipulative intent than brand name mentions ($M = 3.43$, $SD = 1.49$). There was also a significant main effect of explanation, $F(1, 569) = 14.09$, $p < .001$, such that posts with an explanation ($M = 3.61$, $SD = 1.44$) were perceived as less manipulative than those without ($M = 3.99$, $SD = 1.68$). However, the interaction between mention type and explanation was not significant, $F(1, 569) = 0.04$, $p = .840$, indicating that the presence of an explanation reduced perceived manipulative intent regardless of the type of mention. The overall model explained 7.8% of the variance in IMI ($R^2 = .078$).

Figure 7. IMI and Explanation



Then, a linear regression was conducted to examine whether perceived manipulative intent (IMI) predicted engagement. Results revealed a significant negative relationship between IMI and engagement ($b = -0.50$, $SE = 0.04$, $t = -12.51$, $p < .001$, 95% CI $[-0.578, -0.421]$). Higher perceptions of manipulative intent were associated with lower engagement. IMI explained 21.5% of the variance in engagement ($R^2 = .215$).

A linear regression examined whether perceived manipulative intent (IMI) predicted persuasiveness. Results showed a strong negative association ($b = -0.63$, $SE = 0.04$, $t = -15.53$, $p < .001$, 95% CI $[-0.709, -0.550]$), indicating that higher IMI led to lower perceived persuasiveness. IMI accounted for 29.7% of the variance in persuasiveness ($R^2 = .2969$).

A moderated mediation analysis was conducted using PROCESS Model 7 (Hayes, 2022) to examine whether the indirect effect of number of branded@mentions (one vs. four) on engagement operates through perceived manipulative intent (IMI), and whether this indirect effect is moderated by the presence of a transparency explanation (explanation: absent vs. present).

The model predicting IMI was significant, $R^2 = .0782$, $F(3, 569) = 16.09$, $p < .001$. The number of mentions negatively predicted IMI ($b = -0.72$, $SE = 0.40$, $p = .074$, 95% CI $[-1.521, 0.072]$), and the main effect of the explanation condition was not significant ($b = -0.40$, $SE = 0.40$, $p = .321$). The interaction between number of mentions and explanation was also nonsignificant ($b = -0.05$, $p = .840$). In the second stage, perceived manipulative intent significantly predicted engagement ($b = -0.51$, $SE = 0.04$, $p < .001$), and the overall model was significant, $R^2 = .2167$, $F(2, 570) = 78.84$, $p < .001$.

Bootstrapped conditional indirect effects (5,000 samples) confirmed a significant indirect effect of number of mentions on engagement through IMI in both conditions. When no explanation was present, the indirect effect was 0.40 (BootSE = 0.10, 95% CI $[0.20, 0.59]$); when the explanation was present, the indirect effect remained significant at 0.42 (BootSE = 0.09, 95% CI $[0.25, 0.59]$). The index of moderated mediation was not significant (index = 0.03, BootSE = 0.13, 95% CI $[-0.23, 0.28]$).

To examine whether the indirect effect of branded@mention frequency on persuasiveness operates through perceived manipulative intent (IMI), and whether this pathway is moderated by the presence of a transparency

explanation, we conducted a moderated mediation analysis using PROCESS Model 7 (Hayes, 2022). The independent variable was number of branded@mentions (X: one vs. four), the moderator was explanation presence (W: absent vs. present), the mediator was perceived manipulative intent (M: IMI), and the dependent variable was persuasiveness (Y).

The first-stage model predicting IMI was identical to the model tested with engagement and showed similar results. In the second-stage model predicting persuasiveness, both predictors were significant. Perceived manipulative intent strongly and negatively predicted persuasiveness ($b = -0.65$, $SE = 0.04$, $p < .001$), and number of branded@mentions also had a significant direct effect on persuasiveness ($b = -0.28$, $SE = 0.13$, $p = .033$). The overall model accounted for 30.25% of the variance in persuasiveness ($R^2 = .3025$, $F(2, 570) = 123.59$, $p < .001$).

Bootstrapped conditional indirect effects (5,000 samples) revealed that the indirect effect of branded@mention frequency on persuasiveness through IMI was significant regardless of explanation. When no explanation was provided, the indirect effect was 0.50 (BootSE = 0.13, 95% CI [0.25, 0.77]); when the explanation was present, the effect remained significant at 0.54 (BootSE = 0.11, 95% CI [0.33, 0.75]). The index of moderated mediation was not significant (index = 0.03, BootSE = 0.16, 95% CI [-0.29, 0.35]), indicating that the presence of an explanation did not significantly alter the strength of the indirect effect.

Discussion

This study finds that increasing the number of branded@mentions heightens consumers' perceptions of manipulative intent (IMI), which in turn reduces engagement intentions. However, we also show that providing a simple, transparent reasonable explanation about advertising mitigates these negative effects. When influencers explained that advertisements help support their content, perceived manipulative intent decreased, leading to higher engagement, even when multiple branded@mentions were included. We also tested persuasiveness as a new dependent variable to ensure replicability of the effect in advertising context. The findings reveal a consistent pattern: explanation reduces manipulative intent, which in turn increases not only engagement but also perceived persuasiveness of the post. This supports the idea that transparency not only protects engagement but also strengthens the persuasive power of influencer content when followers understand the rationale behind advertising. Although we did not find significant interactions to support H6 and H7, the simple effects and pairwise comparisons revealed meaningful and practical insights.

Study 5

In Study 5, we examined how branded@mentions combined with family-related disclosures influence engagement by shaping perceptions of manipulative intent (IMI). This study explores whether mentioning family relationships can offset or amplify the effects of branded@mentions on user engagement.

Method

We recruited 600 participants via Prolific. After excluding those who failed the attention check, 582 participants remained ($M_{age} = 35$, Male 42%, Female 55%; White 56%, Black 30%). Participants were randomly assigned to one of six conditions varying branded@mention frequency (1 vs. 4) and family relation (I vs. brother vs. sister) (See web appendix H). After viewing the tweet, they completed measures of engagement intentions similar to previous studies (Valsesia et al., 2020; $\alpha = .92$) and manipulative intent (Matthes et al., 2011; $\alpha = .82$). Manipulation checks and demographics were also collected.

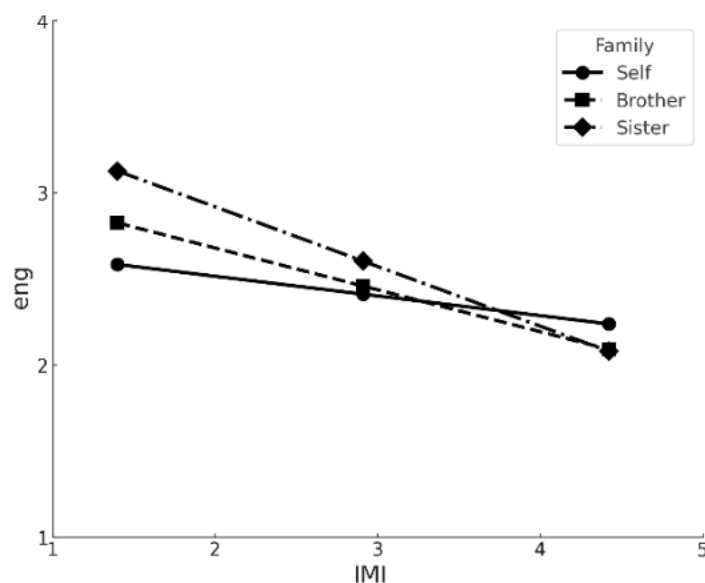
Results

To test whether the number of branded@mentions influences perceived manipulative intent (IMI), we conducted a one-way ANOVA comparing participants exposed to one branded@mention versus four branded@mentions. The analysis revealed a significant effect of branded@mentions on IMI ($F(1, 580) = 65.33$, $p < .001$), supporting H2. Participants exposed to one branded@mention reported lower perceived manipulative intent ($M = 2.43$, $SD = 1.31$) compared to those exposed to four branded@mentions ($M = 3.39$, $SD = 1.55$).

A linear regression was conducted to examine whether perceived manipulative intent (IMI) predicted engagement (eng2). Results revealed a significant negative relationship ($b = -0.24$, $SE = 0.05$, $t = -4.94$, $p < .001$, 95% CI [-0.3303, -0.1423]), indicating that higher perceived manipulative intent was associated with lower engagement. IMI explained 4.0% of the variance in engagement ($R^2 = .0404$).

To test whether the effect of perceived manipulative intent (IMI) on engagement is moderated by family mentions, we conducted a moderation analysis using PROCESS Model 1 (Hayes, 2018). The categorical moderator, family mention (coded as 0 = I, 1 = brother, 2 = sister), was dummy-coded for the analysis (W1 = brother, W2 = sister). In terms of main effects, IMI alone was not a significant predictor of engagement when accounting for the moderator ($b = -0.12, p = .168$). The simple effect of mentioning a brother (W1) was also non-significant ($b = 0.42, p = .275$), whereas mentioning a sister (W2) significantly increased engagement relative to the “self” condition ($b = 0.87, p = .029$). The interaction between IMI and brother mentions ($IMI \times W1$) was not significant ($b = -0.13, p = .265$). However, the interaction between IMI and sister mentions ($IMI \times W2$) approached significance ($b = -0.23, p = .055$), suggesting that the negative effect of perceived manipulative intent on engagement is stronger when a sister is mentioned, supporting H7 (see figure 8).

Figure 8. Interaction between IMI and family on Engagement



To test whether the indirect effect of branded@mentions on engagement via perceived manipulative intent (IMI) is moderated by family-related mentions, we conducted a moderated mediation analysis using PROCESS Model 14 (Hayes, 2018). In this model, the number of branded@mentions was the independent variable (X), engagement was the dependent variable (Y), perceived manipulative intent was the mediator (M), and family mentions (self, brother, sister) served as the moderator (W). The categorical moderator was dummy coded (W1 = brother, W2 = sister).

The model predicting IMI5 was significant, $R^2 = .1012, F(1, 580) = 65.33, p < .001$, with branded@mentions significantly increasing perceived manipulative intent ($b = 0.96, SE = 0.12, t = 8.08, p < .001$). In the second-stage model predicting engagement, the overall model was significant, $R^2 = .0486, F(6, 575) = 4.90, p < .001$. While IMI5 did not significantly predict engagement overall ($b = -0.11, SE = 0.09, p = .181$), the interaction between IMI and family reference approached significance for sister ($IMI \times sister: b = -0.23, p = .055$), suggesting that the negative effect of perceived manipulation on engagement may be stronger when a sister is referenced compared to a brother.

Conditional indirect effects showed that the negative indirect effect of branded@mentions on engagement via IMI was strongest when a sister was mentioned ($effect = -0.33, 95\% CI [-0.511, -0.172]$), weaker when a brother was mentioned ($effect = -0.23, 95\% CI [-0.411, -0.082]$), and non-existent when no family mention occurred ($effect = -0.11, 95\% CI [-0.281, 0.061]$). The index of moderated mediation confirmed that the indirect effect through IMI

was significantly stronger when a sister was mentioned compared to no family mention (index = -0.22 , 95% CI [-0.461 , -0.011]). The difference between brother mentions and no family mention was not statistically significant (index = -0.12 , 95% CI [-0.351 , 0.093]).

Discussion

Study 5 demonstrates that increasing the number of branded@mentions raises perceptions of manipulative intent (IMI), consistent with prior findings on persuasion knowledge. Participants viewed posts with four branded@mentions as more manipulative than those with only one, reinforcing concerns about excessive brand tagging reducing authenticity.

Importantly, this study reveals that family mentions, especially sisters, shape these effects. Mentioning a sister increased engagement overall, likely due to perceptions of warmth and authenticity. However, the negative effect of manipulative intent on engagement was strongest when a sister was mentioned, suggesting that while sister mentions can boost engagement, this benefit diminishes when content feels overly commercial. The moderated mediation results confirm that the indirect negative effect of branded@mentions on engagement through IMI was strongest with sister mentions, weaker with brothers, and weakest without family mentions.

Study 6

In Study 6, we analyze data from X (formerly Twitter) to test how the number of branded@mentions affects engagement (likes, shares, views, comments) and whether family-related mentions moderate this effect. The key independent variable is the number of branded@mentions; engagement is measured by likes, shares, views, and comments. We also examine how family mentions shape these outcomes.

Data

We used a custom web crawler to collect data from public X accounts (Boegershausen et al., 2022). Starting with the top 5,000 X accounts from SocialBlade.com, we randomly sampled accounts through their follow networks, resulting in 17,837 influencers. On December 31, 2024, we scraped each influencer's two most recent tweets, yielding 35,674 tweets. After excluding accounts with fewer than 1,000 followers, non-English tweets, and posts with only photos or videos, the final dataset included 10,305 influencers and 15,101 tweets to analyze the impact of branded@mentions on engagement.

Tweet features

For each tweet, we collected features aligned with prior research (Daniels and Wu, 2024; Chung et al., 2023). A research assistant manually coded the number of branded@mentions by verifying each tagged profile. Using LIWC (2015 dictionary), we created binary indicators for family mentions and gender references. Female (or male) references were coded when both “family” and “female” (or “male”) categories equaled 1. A binary Sponsored variable flagged posts with #Ad, #Sponsored, or URLs. Tweet length was log-transformed, financial terms were measured via LIWC, and hashtags were counted. Tweet date was recorded to control for timing effects.

User profile features

For each tweet, we collected user-level data to assess how user characteristics shape engagement. Key variables included log-transformed followers and followings, bio mentions and hashtags, bio length, and presence of a URL (signaling professionalism). We also recorded account verification status and account age (log-transformed).

Content features

We analyzed tweets using LIWC (Moradi et al., 2024; Pennebaker et al., 2015) to capture emotional tone (positive/negative emotion, anxiety, anger, sadness) and content themes (health, religion, technology, lifestyle, food, politics). These features offer insights into how linguistic and emotional cues shape engagement. See table 8a in web appendix F for variable operationalizations.

The Effect of branded@mentions on Engagement

We employ negative binomial regression to estimate the effect of branded@mentions on engagement metrics such as likes, shares, and views. This approach is appropriate for two reasons: First, the dependent variables, likes, shares, and views, are count data. Second, the distribution of these variables is overdispersed, with the variance substantially exceeding the mean (Valsesia et al., 2020). The model specification is as follows:

$$Y_{ijt} = \beta_0 + \beta_1 \text{Branded Mention}_{ijt} + \beta_2 \text{Female Family References}_{ijt} + \beta_3 \text{Male Family References}_{ijt} + \beta_4 (\text{Branded Mentions}_{ijt} \times \text{Female Family References}_{ijt}) + \beta_5 (\text{Branded Mentions}_{ijt} \times \text{Male Family References}_{ijt}) + X_{ijt} \gamma + \varepsilon_{ijt}$$

In this model, the dependent variable (Y_{ijt}) represents the number of likes, shares, views, or comments for tweet i , posted by user j at time t . The key independent variables include the number of branded@mentions ($\text{Branded Mentions}_{ijt}$). To assess how family-related mentions influence the effect of branded @mentions on engagement, the model includes interaction terms for branded mentions with references to female family members ($\text{Branded Mentions}_{ijt} \times \text{Female Family References}_{ijt}$) and male family members ($\text{Branded Mentions}_{ijt} \times \text{Male Family References}_{ijt}$). These interactions help examine whether the presence of family-related content amplifies or dampens the impact of branded@mentions on engagement. Additionally, the model incorporates a vector of control variables (X_{ijt}) that account for tweet-level and user-level characteristics, as detailed in Table 8a in web appendix I.

Results

Using negative binomial regression, we estimate the effects of branded@mentions on engagement metrics (likes, shares, comments, and views). The results are presented in Table 9a web appendix I.

Main Effects

branded@mentions negatively impact all engagement metrics, with significant negative coefficients for Likes ($\beta = -0.13$, $p < .001$), Shares ($\beta = -0.09$, $p < .001$), Views ($\beta = -0.22$, $p < .001$), and a marginally significant negative effect on Comments ($\beta = -0.36$, $p < .10$). This suggests that branded content receives lower engagement across different forms of interaction. Female family references positively predict engagement across Likes ($\beta = 0.31$, $p < .01$), Shares ($\beta = 0.23$, $p < .05$), and Views ($\beta = 0.37$, $p < .01$), but do not have a significant effect on Comments ($\beta = -0.05$). In contrast, male family references show strong positive effects across all engagement metrics, including Likes ($\beta = 0.72$, $p < .01$), Shares ($\beta = 0.58$, $p < .001$), Views ($\beta = 0.61$, $p < .001$), and Comments ($\beta = 0.65$, $p < .001$). These results indicate that referencing male family members may be particularly effective in driving engagement.

Interaction Effects

The interaction between branded@mentions and female family references negatively impacts Likes ($\beta = -0.39$, $p < .05$), Shares ($\beta = -0.47$, $p < .01$), and Views ($\beta = -0.42$, $p < .01$) but has no effect on Comments ($\beta = -0.006$, $p = .96$). This suggests that while referencing female family members generally increases engagement, this effect is dampened when the content includes branded@mentions. Similarly, the interaction between branded mentions and male family references is negative and significant for Likes ($\beta = -0.30$, $p < .01$), Shares ($\beta = -0.40$, $p < .001$), and Views ($\beta = -0.27$, $p < .01$). However, this interaction is not significant for Comments ($\beta = -0.15$, $p = .17$).

Overall, the interaction effects indicate that female family references experience a stronger negative dampening effect from branded@mentions on Likes, Shares, and Views compared to male references. This suggests that while both male and female family mentions boost engagement, the engagement boost from female references is more sensitive to the presence of branded@mentions, reducing their positive impact more than male references.

Discussion

The findings offer key insights into how branded@mentions affect user engagement. First, increasing their frequency reduces engagement (likes, shares, views, and comments), supporting the idea that excessive branded@mentions can appear overly promotional and deter interaction. Second, the interaction between branded@mentions and male and female references reveals complexity. While both male and female mentions typically boost engagement (Chung et al., 2023), combining them with branded@mentions reduces engagement, suggesting that mixing personal content with promotional elements may backfire. However, this dampening effect is stronger for female references than for male references.

Theoretical contributions

This research advances the literature on influencer marketing, persuasion knowledge, and digital engagement in several important ways. First, we introduce and systematically examine branded@mentions, where influencers tag a brand's profile (for example, @nike), as a distinct and underexplored marketing tactic. While prior research has explored brand references in influencer posts (De Veirman et al., 2017; Jin et al., 2019), it has not distinguished between plain-text brand mentions and direct profile tagging. Our work clarifies this distinction and demonstrates that tagging a brand profile elicits unique consumer inferences and persuasive consequences.

Second, we extend the Persuasion Knowledge Model (Friestad and Wright, 1994) by showing that branded@mentions can activate consumers' recognition of persuasive intent. Across six studies, we show that branded@mentions are perceived as more commercially motivated than brand name mentions, which increases resistance to the message. This finding highlights how even small design features, such as tagging a profile, can prompt persuasion knowledge (Boerman et al., 2017).

Third, we identify inferred manipulative intent as a central explanatory mechanism. Prior work has shown that perceptions of manipulation can undermine persuasion (Campbell and Kirmani, 2000; Ham et al., 2015), and our findings demonstrate that branded@mentions increase IMI, which in turn reduces engagement, influencer credibility, and message persuasiveness. By establishing IMI as a robust mediator, we contribute to a more unified understanding of how digital persuasion unfolds in influencer contexts.

Fourth, we investigate meaningful moderators. We find that transparency through a prosocial explanation can reduce perceptions of manipulation (Evans et al., 2017). In contrast, when branded@mentions reference personal relationships, particularly female relatives, consumers react more negatively. These results highlight important boundary conditions and extend prior work on authenticity and interpersonal cues in influencer communication (Lou and Yuan, 2019).

Practical Implications

This research provides several actionable insights for influencers, brands, and digital marketers aiming to optimize their social media strategies. First, although tagging brands through branded@mentions increases a brand's accessibility and discoverability as we've shown in the pre-test 1, frequent use of this strategy can trigger consumers' skepticism, leading them to perceive posts as manipulative and overly commercial (Mukherjee et al., 2022; Friestad and Wright, 1994). Influencers should thus carefully manage the frequency of branded@mentions to balance brand visibility with follower engagement. Specifically, our findings suggest limiting branded@mentions to fewer than three per post to avoid triggering strong perceptions of manipulative intent.

Second, transparency emerges as a critical strategy to offset negative audience reactions. Clearly communicating the rationale behind promotional posts, for instance by openly stating that brand partnerships help support the influencer's content creation, significantly reduces followers' skepticism and perceptions of manipulation (Boerman et al., 2017; Wojdyski, 2016; Daniels & Wu, 2024). Thus, influencers and brands should adopt transparent communication practices to maintain follower trust and sustain engagement, particularly in scenarios requiring frequent brand references.

Third, our findings indicate that personal disclosures, such as mentioning family ties, can enhance authenticity but can also amplify negative reactions if followers perceive these references as insincere or strategically manipulative (Chung et al., 2023; Kidwell et al., 2011). Particularly, references to female family members tend to heighten these negative effects (Abdul-Ghani et al., 2022; Eagly & Karau, 2002). Thus, influencers should carefully consider the potential ethical implications of involving family, especially female relatives or vulnerable groups such as children, in promotional posts (De Veirman et al., 2019). It is essential to ensure that family references remain genuine and congruent with the influencer's brand image.

Overall, this research underscores the importance of balancing promotional objectives with follower perceptions. By strategically managing branded@mentions, embracing transparent explanations, and thoughtfully navigating personal disclosures, influencers and brands can maximize engagement, and avoid the pitfalls of perceived manipulation.

Limitations and Future Research

This research has several limitations that offer opportunities for future inquiry. First, we did not examine the long-term effects of repeated branded@mentions. Future longitudinal studies could assess whether repeated exposure intensifies or weakens perceived manipulation over time. Second, while we focused on engagement metrics like likes and comments, future work could explore deeper outcomes such as brand loyalty, purchases, or click-through rates.

Third, contextual factors such as emotional tone, timing, and platform norms were not fully considered. These elements may interact with branded@mentions to shape user responses. Relatedly, visual and textual cues like hashtags or emojis may enhance authenticity and deserve further study.

Fourth, although we focused on persuasion knowledge, we did not test psychological reactance or autonomy concerns. Future work could examine whether branded@mentions provoke resistance through these pathways. Individual traits such as social media literacy or skepticism may also moderate responses.

Fifth, while we used data and manipulations from Instagram and X, influencer marketing evolves across platforms. Exploring other environments like TikTok or YouTube would help assess generalizability. Finally, influencer characteristics such as follower count or perceived authenticity may shape how branded@mentions are received. Future research could examine how these attributes moderate consumer reactions.

References available upon request and in the web appendix.

When Mentions Backfire: How Branded@mentions Shape Perceived Manipulation and Engagement **Web Appendix**

Web Appendix A1

Pretest 1

The objective of pretest 1 was to establish whether followers perceive branded@mentions (B@mentions) differently from brand names in social media posts. This differentiation is essential to validate the unique role of B@mentions as a promotional cue, distinguishing them from generic brand names or mentions.

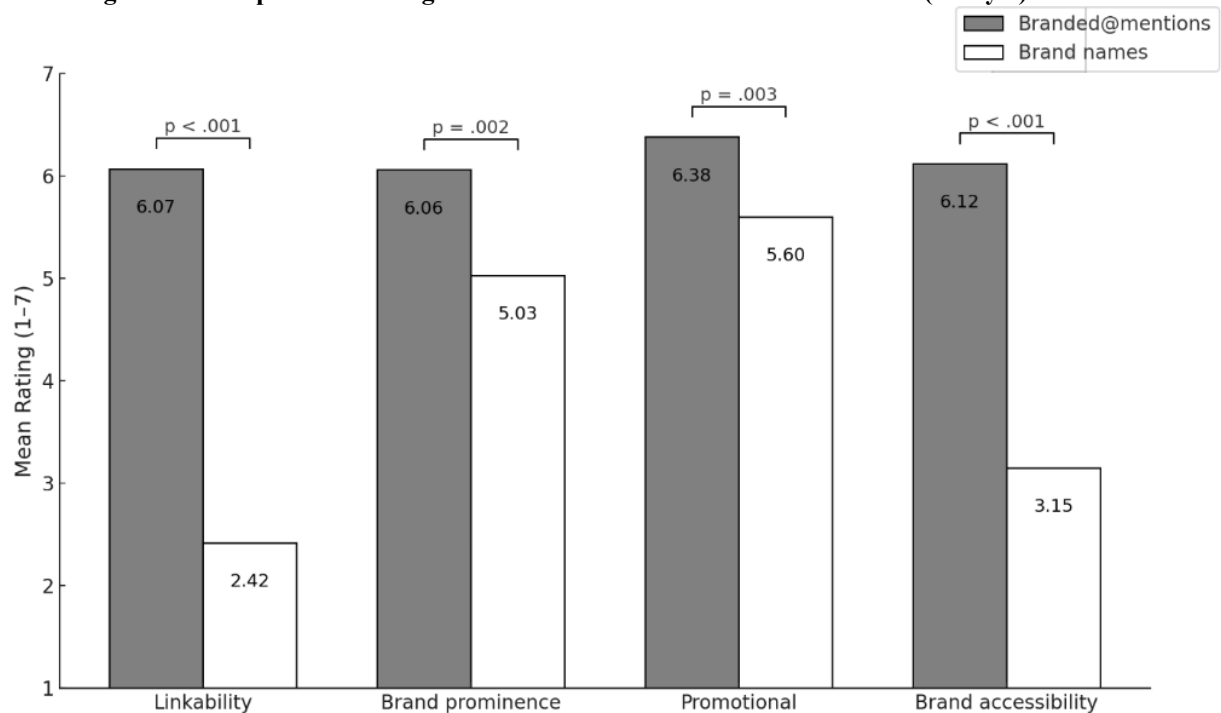
Method

A total of 101 participants were recruited via Prolific. After excluding five participants who failed the attention check (i.e., for this statement, select three), the final sample included 96 participants (Mage=33; White 63%, Black 15%; Msocial media usage=5.93/7). Participants were randomly assigned to one of two conditions: branded@mention or brand name. Each participant viewed a tweet containing either a branded@mention or a brand name, while the tweet's content remained identical across conditions. Perceptions were measured using 7-point Likert scales for prominence (how much the brand stood out) (DeVечchilo and Smith, 2005), promotional intent (how promotional the tweet felt), accessibility (how accessible the brand's profile was in the tweet) and linkability (whether the brand name was linked to the brand's profile with the @ symbol) (See the appendix for manipulations and full scales).

Results

A between-subjects analysis of variance (ANOVA) revealed significant effects of branded@mentions compared to brand names across multiple dimensions. As provided in figure 4. For linkability, the results showed a significant effect ($F(1,94) = 107.564, P < .001, \eta^2 = .533$), with branded@mentions being perceived as more linked to the brand's profile (with branded@mentions being perceived as more linked to the brand's profile ($M = 6.07, SD = 1.66$) compared to brand names ($M = 2.42, SD = 1.72$). For brand prominence, there was a significant difference between two conditions ($F(1,94) = 10.09, P = .002, \eta^2 = .095$). Branded@mentions were rated as more prominent ($M = 6.06, SD = 1.35$) than brand names ($M = 5.03, SD = 1.83$). Similarly, perceptions of being promotional revealed a significant main effect ($F(1,94) = 9.320, p = .003, \eta^2 = .099$). Tweets containing branded@mentions were perceived as more promotional ($M = 6.38, SD = 0.99$) compared to tweets with brand names ($M = 5.60, SD = 1.50$). For brand accessibility, there was a significant difference between the two conditions ($F(1,94) = 97.045, p < .001, \eta^2 = .507$). Branded@mentions were rated significantly higher ($M = 6.12, SD = 1.01$) than brand names ($M = 3.15, SD = 1.92$).

Figure a1. Comparative Rating Between Brand name and Brand Mention (Study 1)



Discussion

The goal of pretest was to establish whether consumers perceive branded@mentions differently from brand names in social media content. Our findings confirm that branded@mentions and brand names are not interchangeable cues; they elicit distinct consumer perceptions. Specifically, branded@mentions offer clear advantages in terms of higher accessibility and linkability. They create a direct path to the brand's profile, enhancing discoverability. They also increase brand prominence, making the brand stand out more within the post. However, these benefits come with trade-offs. Branded@mentions were also perceived as significantly more promotional, suggesting they may trigger persuasion knowledge and affect how authentic or organic the content feels to followers. In contrast, brand names are perceived as less promotional, possibly preserving a more neutral tone in influencer content. Together, these results highlight both the advantages and disadvantages of using branded@mentions versus brand names. In the next experiment, we build on these insights by examining how both the presence and frequency of branded@mentions influence consumer inferences of manipulative intent and their likelihood to engage with influencer content.

Web Appendix A2

Pretest 1 - Conditions

Condition 1: Brand Name



Condition 2: Brand Mentions



Web Appendix A3

Pretest- Scales and Questions

- **Brand Prominence** (DelVecchio and Smith, 2005; $\alpha = .95$)

To what extent do you agree with the following statements? [1-7] [Strongly disagree to Strongly agree]

- When I saw the tweet, it was easy to identify the brand.
- When I saw the tweet, the brand stood out clearly.
- When I saw the tweet, the brand was prominently displayed.

- **Being Promotional**

- How promotional did the tweet feel based on how the brand was presented? [1-7] [Not at all to Very much so]

- **Brand Accessibility**

- How accessible was the brand's X (Twitter) profile in the tweet you saw? [1-7] [Not at all to Very much so]

- **Brand Linkability:**

How much do you agree with the statement?

- The Frutigo name was linked to Frutigo's profile with the @ symbol. [1-7] [Strongly disagree to Strongly agree]

	IV	DV	Mediator	Moderator	Settings	Findings	Hypotheses
Study 1 (Instagram) Experiment	Number of branded@mentions (No brand, Brand name, 1@ to 5@)	Engagement intentions	IMI		Gender = Female Context = Soda	More branded@mentions increase IMI, which reduces engagement. IMI mediates the relationship.	H2, H3
Study 2 (Instagram) Experiment	Brand name (1 vs 3) vs Brand@mention (1 vs 3)	Engagement intentions and Impression	IMI		Gender = Male Context = Coffee	Branded@mentions (vs. brand name) and higher frequency increase IMI, reducing engagement via IMI.	H1, H3
Study 3 (X-Twitter) Experiment	Branded@mentions (1 vs. 4)	Engagement intentions and Impression	IMI		Gender = Female Context = Restaurant	Replicates Study 2 on X; more branded@mentions increase IMI, reducing engagement.	H2, H3, H4
Study 4 (Instagram) Experiment	Branded@mention (1 vs. 4)	Engagement intentions and Persuasiveness	IMI	Explanation (present vs. absent)	Gender = Male Context = Coffee	Transparent explanation reduces IMI and mitigates the negative effects of branded@mentions on engagement and persuasiveness.	H5, H6
Study 5 (X-Twitter) Experiment	Branded@mention (1 vs. 4)	Engagement intentions	IMI	Family references (brother vs. sister vs. I)	Gender = Female Context = Restaurant	Family mentions, especially sisters, amplify the negative effect of IMI on engagement.	H7
Study 6 (X-Twitter) Secondary Data	Number of Branded@mentions	Engagement		Family references (male vs female)		Branded@mentions reduce real engagement. Family mentions moderate	H2, H7

						the effect; female mentions show a stronger dampening interaction with branded@mentions.	

WEB APPENDIX B

Table 1a. Summary of studies

WEB APPENDIX C

Web Appendix C1 – Study 1 Scales and Questions

Participants who do not select 'using social network sites' for the first question and do not select 'Instagram' for the second question will be screened out.

Before moving to the main survey, you will complete a very brief pre-screening survey to find out if you are eligible for our study. Please tell us in which of these activities you engage in regularly. Please click all that apply.

- ☐ Listening to the radio
- ☐ Extreme Sports
- ☐ Using social network sites online
- ☐ Driving
- ☐ Going to the movies
- ☐ Traveling
- ☐ Watching TV
- ☐ Texting
- ☐ Drinking wine
- ☐ Blogging
- ☐ Swimming
- ☐ Cooking
- ☐ Social gatherings
- ☐ Going to concerts

You told us you regularly use social network sites online. Please tell us which social networks you usually use:

- ☐ Twitter
- ☐ Instagram
- ☐ Facebook
- ☐ Tumblr
- ☐ Pinterest
- ☐ Reddit
- ☐ Tiktok
- ☐ Snapchat

Attention check

You are near the end of the survey. Additionally, we are interested in information about you. Specifically, we are interested in whether you take the time to read directions; if not, some results may not tell us very much about decision making in the real world. To show that you have read the instructions, please ignore the correct answer to the following question and instead mark the word purple as your answer. Thank you very much. This kind of question is necessary for the scientific validity of any responses we get from you in these tasks. We appreciate it. In your opinion, what color is one that most accurately describes the color of the ocean?

☐ Red
 ☐ Orange
 ☐ Yellow
 ☐ Green
 ☐ Blue
 ☐ Purple

Web Appendix C2- Conditions – Study 1

No Brand Name	Brand Name

 Caleb_mc · Follow      Liked by rachel_sh and 17,923 others Caleb_mc My mornings begin with the little things that make a big difference—sunlight coming through the window, music that lifts my mood, and a few stretches to get my body moving. It's not about being perfect; it's about being present. I take my time, let the playlist guide the pace, and breathe into the quiet. A short stretch resets my energy and helps me feel grounded before the noise of the day begins. These few moments are mine, and I protect them. Then it's time to drink coffee. It can help you feel awake, focused, and ready to take on whatever the day brings. It's smooth, bold, and more than just a cup—it's part of the mindset I need to show up as my best self. Even if the rest of the day gets messy, starting strong makes all the difference. Find what fuels you, hold on to it, and let it carry you forward. View all comments  Add a comment... 6 days ago	 Caleb_mc · Follow      Liked by rachel_sh and 17,923 others Caleb_mc My mornings begin with the little things that make a big difference—sunlight coming through the window, music that lifts my mood, and a few stretches to get my body moving. It's not about being perfect; it's about being present. I take my time, let the playlist guide the pace, and breathe into the quiet. A short stretch resets my energy and helps me feel grounded before the noise of the day begins. These few moments are mine, and I protect them. Then it's time to drink Frutigo coffee. It can help you feel awake, focused, and ready to take on whatever the day brings. It's smooth, bold, and more than just a cup—it's part of the mindset I need to show up as my best self. Even if the rest of the day gets messy, starting strong makes all the difference. Find what fuels you, hold on to it, and let it carry you forward. View all comments  Add a comment... 6 days ago

One Branded@mention	Two Branded@mentions

 Caleb_mc · Follow      Liked by rachel_sh and 17,923 others Caleb_mc My mornings begin with the little things that make a big difference—sunlight coming through the window, music that lifts my mood, and a few stretches to get my body moving. It's not about being perfect; it's about being present. I take my time, let the playlist guide the pace, and breathe into the quiet. A short stretch resets my energy and helps me feel grounded before the noise of the day begins. These few moments are mine, and I protect them. Then it's time to drink @Frutigo coffee. It can help you feel awake, focused, and ready to take on whatever the day brings. It's smooth, bold, and more than just a cup—it's part of the mindset I need to show up as my best self. Even if the rest of the day gets messy, starting strong makes all the difference. Find what fuels you, hold on to it, and let it carry you forward. View all comments  Add a comment... 6 days ago	 Caleb_mc · Follow      Liked by rachel_sh and 17,923 others Caleb_mc My mornings begin with the little things that make a big difference—sunlight coming through the window, music that lifts my mood, and a few stretches to get my body moving. It's not about being perfect; it's about being present. @Frutigo I take my time, let the playlist guide the pace, and breathe into the quiet. A short stretch resets my energy and helps me feel grounded before the noise of the day begins. These few moments are mine, and I protect them. Then it's time to drink @Frutigo coffee. It can help you feel awake, focused, and ready to take on whatever the day brings. It's smooth, bold, and more than just a cup—it's part of the mindset I need to show up as my best self. Even if the rest of the day gets messy, starting strong makes all the difference. Find what fuels you, hold on to it, and let it carry you forward. View all comments  Add a comment... 6 days ago

Three Branded@mentions	Four Branded@mentions



Caleb_mc · Follow



Liked by rachel_sh and 17,923 others

Caleb_mc My mornings begin with the little things that make a big difference—sunlight coming through the window, music that lifts my mood, and a few stretches to get my body moving. It's not about being perfect; it's about being present.

[@Frutigo](#)

I take my time, let the playlist guide the pace, and breathe into the quiet. A short stretch resets my energy and helps me feel grounded before the noise of the day begins. These few moments are mine, and I protect them.

[@Frutigo](#)

Then it's time to drink [@Frutigo](#) coffee. It can help you feel awake, focused, and ready to take on whatever the day brings. It's smooth, bold, and more than just a cup—it's part of the mindset I need to show up as my best self.

Even if the rest of the day gets messy, starting strong makes all the difference. Find what fuels you, hold on to it, and let it carry you forward.

[View all comments](#)



Add a comment...

6 days ago



Caleb_mc · Follow



Liked by rachel_sh and 17,923 others

Caleb_mc My mornings begin with the little things that make a big difference—sunlight coming through the window, music that lifts my mood, and a few stretches to get my body moving. It's not about being perfect; it's about being present.

[@Frutigo](#)

I take my time, let the playlist guide the pace, and breathe into the quiet. A short stretch resets my energy and helps me feel grounded before the noise of the day begins. These few moments are mine, and I protect them.

[@Frutigo](#)

Then it's time to drink [@Frutigo](#) coffee. It can help you feel awake, focused, and ready to take on whatever the day brings. It's smooth, bold, and more than just a cup—it's part of the mindset I need to show up as my best self.

[@Frutigo](#)

Even if the rest of the day gets messy, starting strong makes all the difference. Find what fuels you, hold on to it, and let it carry you forward.

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Add a comment...

6 days ago

Five Branded@mentions



Caleb_mc · Follow



Liked by [rachel_sh](#) and 17,923 others

Caleb_mc My mornings begin with the little things that make a big difference—sunlight coming through the window, music that lifts my mood, and a few stretches to get my body moving. It's not about being perfect; it's about being present.

[@Frutigo](#)

I take my time, let the playlist guide the pace, and breathe into the quiet. A short stretch resets my energy and helps me feel grounded before the noise of the day begins. These few moments are mine, and I protect them.

[@Frutigo](#)

Then it's time to drink [@Frutigo](#) coffee. It can help you feel awake, focused, and ready to take on whatever the day brings. It's smooth, bold, and more than just a cup—it's part of the mindset I need to show up as my best self.

[@Frutigo](#)

Even if the rest of the day gets messy, starting strong makes all the difference. Find what fuels you, hold on to it, and let it carry you forward.

[@Frutigo](#)

[View all comments](#)



Add a comment...

6 days ago

Web Appendix C3 – Study 1 – Manipulation Checks Manipulation-check item (single-item scale)

“The Instagram caption mentions @Frutigo a lot of times.”

Response format: 1 = Strongly Disagree ... 7 = Strongly Agree

Table 2a. Manipulation Check Descriptive

Condition	Mean	SD	N
1@	2.615	1.583	91
2@	4.621	1.586	95
3@	6.011	1.348	94
4@	6.269	1.162	93
5@	6.293	1.043	92
name	2.645	1.523	93
nobrand	2.585	1.706	94

A manipulation check was conducted to assess whether participants perceived differences in the number of times the brand @Frutigo was mentioned in the Instagram caption. Participants responded to a single-item measure which is “the Instagram caption mentions @Frutigo a lot of times” on a 7-point scale (1 = Strongly Disagree to 7 = Strongly Agree). A one-way ANOVA revealed a significant main effect of condition on perceived frequency of branded mentions, $F(6, 645) = 143.62, p < .001$, indicating that participants reliably detected the intended variation across experimental groups. Mean ratings increased with the number of @mentions in the caption: from $M = 2.62$ ($SD = 1.58$) in the 1@ condition, to $M = 4.62$ in 2@, and as high as $M = 6.29$ in the 5@ condition. In contrast, the brand name-only ($M = 2.65$) and no-brand ($M = 2.59$) conditions yielded similarly low perceived mention levels. Pairwise comparisons confirmed that each increase in the number of @mentions significantly elevated perceived brand mention intensity, with no significant differences observed between the brand name and no-brand conditions ($p = .776$). These results confirm the effectiveness of the manipulation: participants accurately perceived greater frequency of @Frutigo mentions in the higher-tag conditions.

Pairwise comparison results for Inferences of Manipulative Intent

Table 3a. Descriptive statistics for IMI by condition

Condition	Mean	SD	N
No-brand	2.527	1.298	94
Brand name	3.129	1.378	93
1 @	3.242	1.347	91
2 @	3.745	1.557	95
3 @	4.476	1.448	94

4 @	4.677	1.542	93
5 @	4.332	1.699	92

Table 4a. Pairwise Comparisons Results

Contrast	ΔM	SE	t	p	95 % CI
2 @ – 1 @	0.503	0.216	2.33	.020	0.079, 0.927
3 @ – 1 @	1.234	0.217	5.70	<.001	0.809, 1.660
4 @ – 1 @	1.436	0.217	6.61	<.001	1.009, 1.862
5 @ – 1 @	1.090	0.218	5.00	<.001	0.662, 1.517
Name – 1 @	–0.113	0.217	–0.52	.604	–0.539, 0.314
No-brand – 1 @	–0.715	0.217	–3.30	.001	–1.140, –0.290
3 @ – 2 @	0.731	0.214	3.41	.001	0.311, 1.152
4 @ – 2 @	0.933	0.215	4.34	<.001	0.511, 1.355
5 @ – 2 @	0.587	0.215	2.72	.007	0.164, 1.010
Name – 2 @	–0.616	0.215	–2.87	.004	–1.038, –0.194
No-brand – 2 @	–1.218	0.214	–5.69	<.001	–1.639, –0.797
4 @ – 3 @	0.201	0.215	0.93	.350	–0.222, 0.624
5 @ – 3 @	–0.145	0.216	–0.67	.504	–0.569, 0.280
Name – 3 @	–1.347	0.215	–6.25	<.001	–1.770, –0.924
No-brand – 3 @	–1.949	0.215	–9.07	<.001	–2.371, –1.528
5 @ – 4 @	–0.346	0.217	–1.60	.111	–0.771, 0.079
Name – 4 @	–1.548	0.216	–7.17	<.001	–1.973, –1.124
No-brand – 4 @	–2.151	0.215	–9.98	<.001	–2.574, –1.728
Name – 5 @	–1.202	0.217	–5.55	<.001	–1.628, –0.777
No-brand – 5 @	–1.805	0.216	–8.36	<.001	–2.229, –1.381
No-brand – Name	–0.602	0.215	–2.80	.005	–1.025, –0.179

WEB APPENDIX D

Table 5a. Constructs, Items, and Reliabilities

Construct	Items	Study numbers
Inferences of Manipulative Intent	Matthes et al., 2011 (1-7) To what extent do you agree with the following statements about the [tweet or post] you have seen? • There were too many advertisements in the [tweet or post]. • I felt disturbed by the advertisement in the [tweet or post]. • Obviously, the brand was given the opportunity to promote its brand through [tweet or post]. • It was really annoying to me that advertisements were included in the [tweet or post]	Studies 1 to 5
Engagement	Valsesia et al., 2020 (1-7) Please answer the following questions based on the tweet you saw. • How likely are you to 'like' the [tweet or post] you saw?	Studies 1 to 5

	• How likely are you to 'comment' on the [tweet or post] you saw? • How likely are you to 'share' the [tweet or post] you saw? • How likely are you to 'retweet' the [tweet or post] you saw?	
Persuasiveness	Daniels and Wu, 2024 (1-7) • How likely would you be to look at Caleb's recommendations on Instagram? • How interested would you be in looking at Caleb's recommendations on Instagram? • I think Caleb's recommendations on Instagram would be helpful.	Study 4
Overall Impression	Daniels and Wu, 2024 (1-7) To what extent do you agree with the following statements about the tweet you have seen? • Unfavorable/Favorable • Unlikable/Likeable • Negative/Positive	Study 2 and 3
Perceived intrusiveness	Wang and Calder, 2006 (1-7) To what extent do you agree with the following statements about the tweet you have seen? • Distracting • Disturbing • forced • interfering • intrusive • obtrusive	Study 2

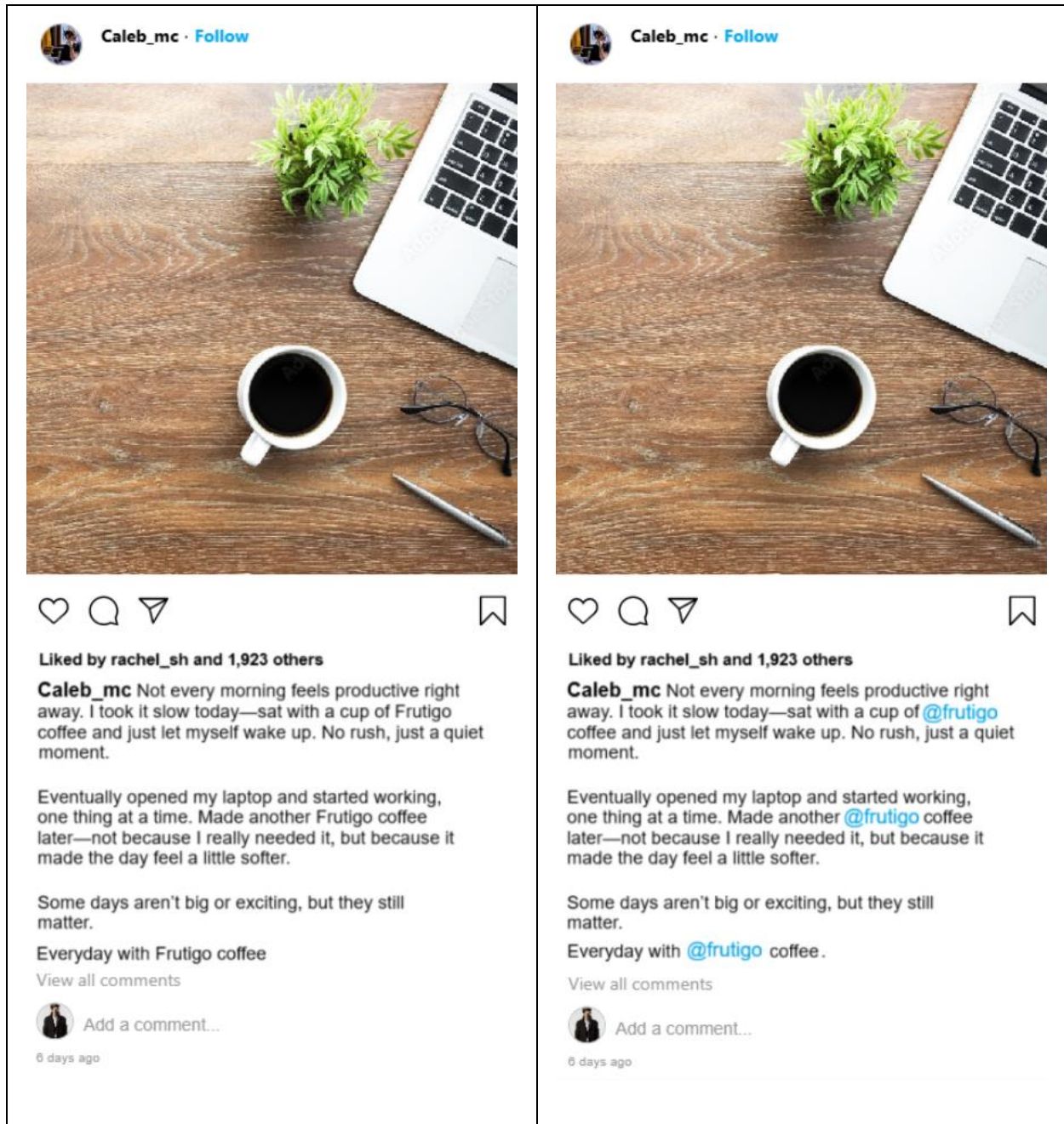
WEB APPENDIX E

Web Appendix E1. Study 2 Conditions

One name	One @mention

 Caleb_mc · Follow      Liked by rachel_sh and 1,923 others Caleb_mc Not every morning feels productive right away. I took it slow today—sat with a cup of coffee and just let myself wake up. No rush, just a quiet moment. Eventually opened my laptop and started working, one thing at a time. Made another Frutigo coffee later—not because I really needed it, but because it made the day feel a little softer. Some days aren't big or exciting, but they still matter. Everyday with coffee. View all comments  Add a comment... 6 days ago	 Caleb_mc · Follow      Liked by rachel_sh and 1,923 others Caleb_mc Not every morning feels productive right away. I took it slow today—sat with a cup of coffee and just let myself wake up. No rush, just a quiet moment. Eventually opened my laptop and started working, one thing at a time. Made another @frutigo coffee later—not because I really needed it, but because it made the day feel a little softer. Some days aren't big or exciting, but they still matter. Everyday with coffee. View all comments  Add a comment... 6 days ago

Three names	Three @mentions



Web Appendix E2 - Study 2

Manipulation check 1

To assess whether participants recognized the form used to present Frutigo in the caption, we asked them to choose between “Frutigo” (coded as 1) and “@frutigo” (coded as 2). A one-way ANOVA revealed a significant effect of condition on participants’ responses, $F(3, 377) = 222.80, p < .001, \eta^2 = .639$. Participants in the @mention conditions (1 @: $M = 1.94, SD = 0.24$; 3+ @s: $M = 1.99, SD = 0.10$) overwhelmingly selected “@frutigo,” while

those in the brand-name-only ($M = 1.25$, $SD = 0.44$) and no-brand conditions ($M = 1.11$, $SD = 0.32$) were much more likely to select “Frutigo”

Manipulation check 2

To check whether participants perceived the number of brand mentions, we asked them to rate how much they agreed with the statement: “*The Instagram caption mentions @frutigo a lot of times*” (1 = Strongly Disagree, 7 = Strongly Agree). A one-way ANOVA revealed a significant effect of condition on perceived number of brand mentions, $F(3, 377) = 129.32$, $p < .001$, $\eta^2 = .51$. Participants in the multiple @mention condition ($M = 5.77$, $SD = 1.50$) reported significantly higher perceived mentions compared to the brand name only ($M = 2.05$, $SD = 1.48$), single @mention ($M = 2.36$, $SD = 1.36$), and no-brand ($M = 2.13$, $SD = 1.76$) conditions. Pairwise comparisons confirmed that the multiple @mention condition differed significantly from all others ($ps < .001$), whereas the differences between the brand name, one @mention, and no-brand conditions were not significant. These results indicate that participants successfully detected the increased brand repetition in the multiple @mention condition, confirming the effectiveness of the manipulation.

Manipulation check 3

To assess perceptions of brand mention frequency using the brand name, participants were asked to rate their agreement with the statement: “*The Instagram caption mentions Frutigo a lot of times*” (1 = Strongly Disagree, 7 = Strongly Agree). A one-way ANOVA revealed a significant effect of condition on perceived frequency, $F(3, 377) = 74.69$, $p < .001$, $\eta^2 = .373$. Participants in the no-brand condition reported the highest perceived frequency ($M = 5.51$, $SD = 1.69$), followed by the multiple brand name mentions condition ($M = 3.80$, $SD = 2.21$), the single brand name condition ($M = 2.71$, $SD = 1.61$), and the 1 @mention condition ($M = 2.03$, $SD = 1.31$). Pairwise comparisons confirmed that all conditions significantly differed from one another ($ps < .01$), except for the small but significant difference between the single brand name and 1 @mention conditions ($p = .008$). These findings indicate that participants clearly perceived increased repetition of the brand when it was mentioned multiple times by name, supporting the success of the manipulation.

WEB APPENDIX F

Web Appendix F1- Pre-test 2

The objective of Pre-Test 2 was to determine whether participants perceive tweets with four branded@mentions as having a higher number of mentions than tweets with one branded@mention. This pre-test aimed to validate whether participants could clearly distinguish between the two conditions based on the number of branded@mentions.

Method

The study recruited 100 participants through Prolific. After excluding three participants who failed the attention check (for this statement, select three), 97 valid responses were included in the analysis. Participants were randomly assigned to one of two conditions: one group viewed a tweet containing a single branded@mention, while the other group viewed a tweet with four branded@mentions. All tweets referenced the made-up brand “@tehr_food” to ensure consistency.

Participants responded to three manipulation check questions assessing their perception of the number of branded@mentions in the tweet. These questions included: "The tweet mentions @tehr_food a lot of times," "The tweet frequently references @tehr_food," and "There are numerous mentions of @tehr_food in this tweet." Responses were collected on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). (See appendix for manipulations).

Results

A series of independent-samples t-tests and one-way ANOVAs were conducted for the three manipulation check questions. For the first question, "The tweet mentions @tehr_food a lot of times," the analysis revealed a significant difference between conditions. Participants in the four-B@mention condition ($M = 6.47$, $SD = 0.84$) rated the tweet significantly higher compared to participants in the one-mention condition ($M = 2.29$, $SD = 1.45$), $t(95) = 17.03$, $p < .001$, 95% CI [3.69, 4.67]). The ANOVA also supported this result ($F(1, 95) = 290.18$, $p < .001$). For the second question, "The tweet frequently references @tehr_food," participants in the four-mention condition ($M = 6.22$, $SD = 1.33$) rated the frequency significantly higher than those in the one-mention condition ($M = 2.77$, $SD = 1.93$), $t(95) = 10.38$, $p < .001$, 95% CI [2.78, 4.11]). The corresponding ANOVA was significant ($F(1, 95) = 102.34$, $p < .001$). For the third question, "There are numerous mentions of @tehr_food in this tweet," participants in the four-mention condition ($M = 6.47$, $SD = 0.87$) provided significantly higher ratings than those in the one-mention condition ($M = 1.83$, $SD = 1.09$), $t(95) = 23.22$, $p < .001$, 95% CI [4.24, 5.04]). The ANOVA yielded a significant result ($F(1, 95) = 521.28$, $p < .001$).

Discussion

The results of Pre-Test 2 confirmed that participants perceived tweets with four branded@mentions as significantly higher in the frequency of branded mentions compared to tweets with only one branded@mention. These findings provide evidence that participants are sensitive to the actual number of mentions in tweets, validating the experimental manipulation for the main study.

Web Appendix E2 - Pre-test 2 – Conditions

One B@mention



Four B@mentions



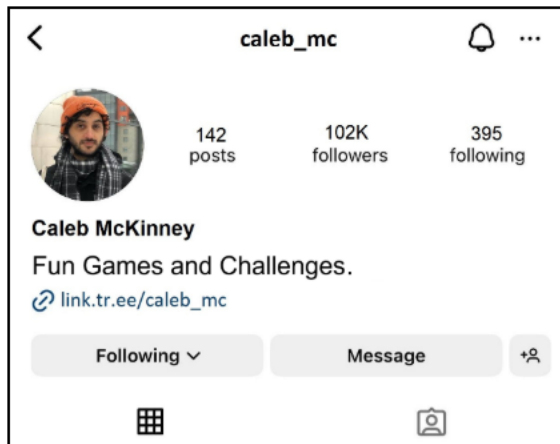
Web Appendix E3 - Study 3 – Manipulation check results

To confirm the effectiveness of the manipulation, we analyzed participants' responses to the statement: "The tweet mentions @tehr_food a lot of times," on a 7-point Likert scale (1 = Strongly disagree, 7 = Strongly agree). A between-groups ANOVA revealed a significant difference between the two conditions ($F(1, 276) = 736.10$, $p < .001$). Participants in the condition with four branded@mentions rated the tweet significantly higher in perceived frequency of mentions ($M = 6.23$, $SD = 1.04$) compared to those in the one branded-@mention condition ($M = 2.25$, $SD = 1.38$).

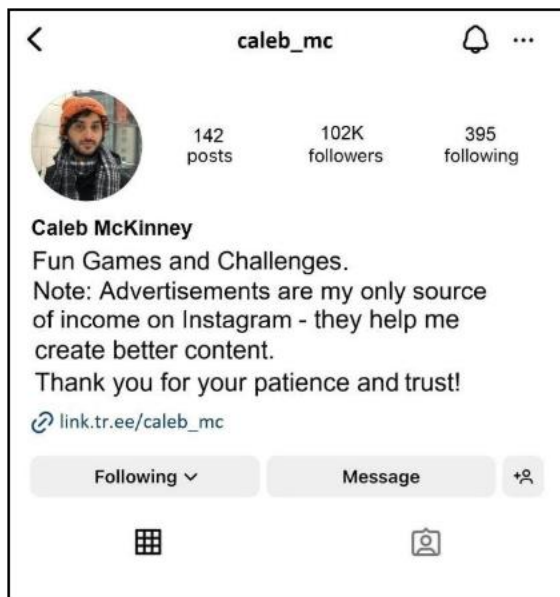
WEB APPENDIX G

Web Appendix G1

Condition – Control



Condition – Explanation



Condition Four B@mentions

Condition: 1 B@mention



Web Appendix G2 – Study 4

Manipulation check results

For the branded@mentions manipulation, participants accurately recognized the differences in the number of mentions across conditions. A one-way ANOVA revealed a significant effect of condition on perceptions of the number of mentions, $F(3, 569) = 207.36$, $p < .001$. Participants in the four-mention conditions ($M = 5.81$ and $M = 5.73$) reported higher agreement that the post mentioned @frutigo “a lot” than those in the one-mention conditions ($M = 2.86$ and $M = 2.67$).

For the explanation manipulation, participants correctly recalled whether the influencer provided an explanation about advertising. A one-way ANOVA showed a significant effect of condition, $F(3, 569) = 276.85$, $p < .001$. Participants in the explanation-present conditions ($M = 6.01$ and $M = 5.99$) reported higher agreement that the influencer explained their source of income than those in the explanation-absent conditions ($M = 2.55$ and $M = 2.52$).

These findings confirm that participants accurately detected both the number of branded@mentions and the presence or absence of the advertising explanation.

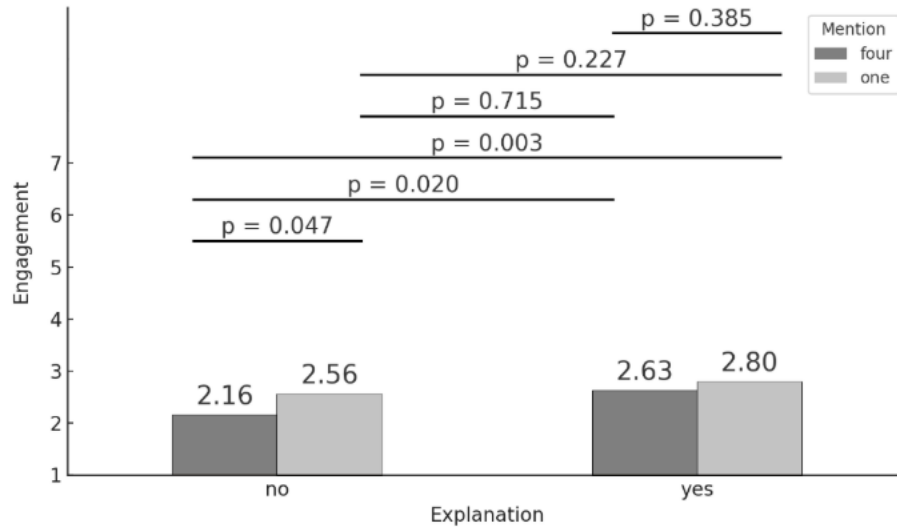
Main effects on Engagement and Persuasiveness

Then we examined the effect of the number of branded@mentions on engagement intentions. Descriptive means indicated that engagement was lowest when participants viewed posts with four branded@mentions and no explanation ($M = 2.16$), slightly higher with four mentions and an explanation ($M = 2.63$), and highest when posts included only one mention, whether without ($M = 2.56$) or with an explanation ($M = 2.80$).

The ANOVA revealed a significant main effect of branded@mentions on engagement, $F(1, 569) = 4.09$, $p = .044$, $\eta^2 = .007$. Posts with fewer mentions led to higher engagement intentions than those with four mentions. The main effect of explanation was also significant, $F(1, 569) = 6.28$, $p = .012$, $\eta^2 = .011$. Posts that included an explanation elicited higher engagement intentions compared to those without. The interaction between number of mentions and explanation was not significant, $F(1, 569) = 0.64$, $p = .43$, $\eta^2 = .001$.

As illustrated in figure 2, pairwise comparisons revealed that engagement was significantly lower for posts with four mentions and no explanation compared to posts with one mention and no explanation ($p = .047$), and also lower than posts with four mentions accompanied by an explanation ($p = .020$). Engagement was numerically highest when only one branded@mention was included alongside an explanation

Figure 2. Engagement

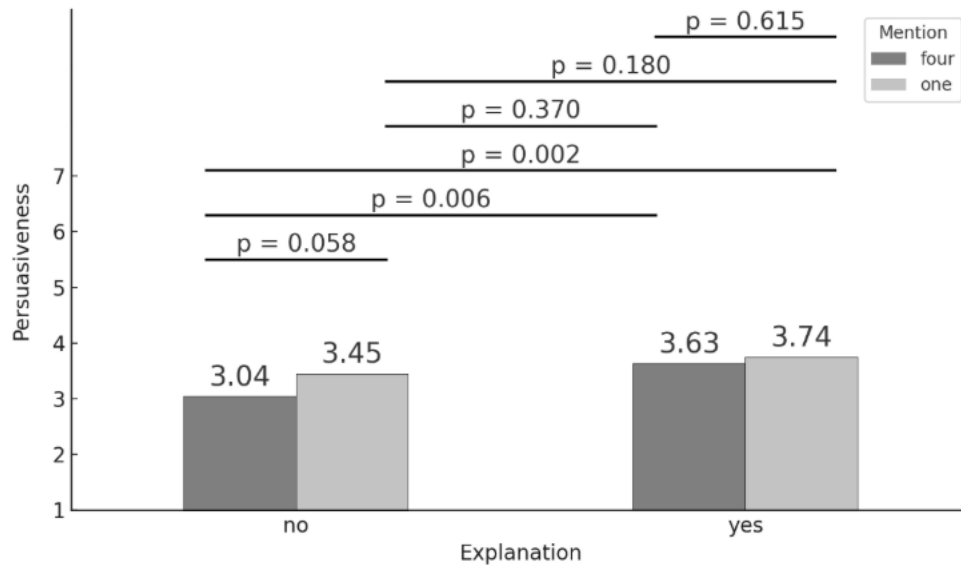


We then analyzed perceptions of persuasiveness across the conditions. Descriptive means showed that persuasiveness was lowest when participants viewed posts with four branded@mentions and no explanation ($M = 3.04$), and higher when only one mention was used without an explanation ($M = 3.45$). Providing an explanation for the advertisement increased persuasiveness in both the four-mention ($M = 3.63$) and one-mention ($M = 3.74$) conditions.

The ANOVA indicated a significant main effect of explanation on persuasiveness, $F(1, 569) = 8.33$, $p = .004$, $\eta^2 = .014$. Posts that provided an explanation were perceived as more persuasive overall compared to those without. The main effect of the number of branded@mentions was marginally significant, $F(1, 569) = 2.89$, $p = .090$, $\eta^2 = .005$, suggesting a trend for fewer mentions to lead to higher persuasiveness. The interaction between mentions and explanation was not significant, $F(1, 569) = 0.98$, $p = .32$, $\eta^2 = .002$.

As illustrated in figure 3, pairwise comparisons showed that persuasiveness was significantly lower in the four-mention, no-explanation condition compared to both the four-mention, explanation-present condition ($p = .006$) and the one-mention, explanation-present condition ($p = .002$). These findings suggest that providing an explanation increases the perceived persuasiveness of influencer content, even in the presence of multiple branded mentions.

Figure 3. Persuasiveness



Web Appendix G3 – Process Model 4 – Study 4

To further examine the role of perceived manipulative intent (IMI) in shaping engagement, we tested a mediation model using PROCESS Model 4 (Hayes, 2018). In this model, the experimental condition (coded as 1 = four b@mentions/no explanation, 2 = four b@mentions/explanation, 3 = one b@mention/no explanation, 4 = one b@mention/explanation) served as the independent variable (X), IMI as the mediator (M), and engagement as the dependent variable (Y).

The first stage of the model regressed IMI on the condition indicators. Compared to the reference group (condition 1: four b@mentions/no explanation), participants reported significantly lower IMI in condition 2 (four b@mentions/explanation; $b = -0.45$, $p = .012$), condition 3 (one b@mention/no explanation; $b = -0.78$, $p < .001$), and condition 4 (one b@mention/explanation; $b = -1.28$, $p < .001$). In the second stage of the model, engagement was regressed on the condition indicators and IMI. The results revealed a significant negative effect of IMI on engagement ($b = -0.50$, $p < .001$), indicating that higher perceptions of manipulative intent reduce engagement.

The indirect effects of the conditions on engagement via IMI were significant across all contrasts. For condition 2 (four b@mentions/explanation), the indirect effect was 0.23 (Boot 95% CI [0.043, 0.419]). For condition 3 (one b@mention/no explanation), the indirect effect was 0.39 (Boot 95% CI [0.193, 0.592]). For condition 4 (one b@mention/explanation), the indirect effect was 0.64 (Boot 95% CI [0.441, 0.857]).

We further examined whether the effects of branded@mention frequency and explanation on persuasiveness were mediated through perceived manipulative intent (IMI). Using PROCESS Model 4, we tested this model with condition as the independent variable (X), IMI as the mediator (M), and persuasiveness as the dependent variable (Y). Conditions were coded as 1 = four b@mentions/no explanation, 2 = four b@mentions/explanation, 3 = one b@mention/no explanation, and 4 = one b@mention/explanation.

First, IMI was regressed on the condition indicators. Relative to the reference group (condition 1: four b@mentions/no explanation), participants reported significantly lower IMI in condition 2 ($b = -0.45$, $p = .012$), condition 3 ($b = -0.77$, $p < .001$), and condition 4 ($b = -1.28$, $p < .001$). Next, persuasiveness was regressed on the condition indicators and IMI. The results indicated a significant negative effect of IMI on persuasiveness ($b = -0.64$, $p < .001$, 95% CI [-0.727, -0.561]), demonstrating that higher manipulative intent perceptions lead to lower perceived persuasiveness. Importantly, the indirect effects of the experimental conditions on persuasiveness via IMI were statistically significant across all contrasts. For condition 2 (four b@mentions/explanation), the indirect effect was 0.29 (Boot 95% CI [0.056, 0.526]). For condition 3 (one b@mention/no explanation), the indirect effect was 0.49 (Boot 95% CI [0.250, 0.754]). For condition 4 (one b@mention/explanation), the indirect effect was 0.82 (Boot 95% CI [0.575, 1.087]).

WEB APPENDIX H

Web Appendix H1 - Study 5 – Manipulation check results

The manipulation checks confirmed the effectiveness of the experimental manipulations for branded@mentions frequency. For branded@mentions frequency, a one-way ANOVA showed a significant effect of mention frequency on participants' perception of the number of mentions ($F(1, 213) = 451.91$, $p < 0.001$, $R^2 = .679$), where those in the condition where the branded@mentions appeared 4 times ($M = 6.12$) perceived the brand to mention a lot of times whereas those in the condition where the branded@mentions only appeared once ($M = 2.53$) perceived it to be mentioned significantly less. This result indicates that participants accurately perceived differences in the number of branded@mentions across conditions, validating the manipulation.

The manipulation checks confirmed the effectiveness of the experimental manipulations for mention frequency and family ties. For branded@mentions frequency, a one-way ANOVA showed a significant effect of mention frequency on participants' perception of the number of branded@mentions ($F(1, 636) = 886.6$, $p < 0.001$), where those in the condition where the branded@mentions appeared 4 times ($M = 6.47$) perceived the brand to be mentioned a lot of times whereas those in the condition where the branded@mentions only appeared once ($M = 3.03$) perceived it to be mentioned significantly less. This result indicates that participants accurately perceived differences in the number of branded@mentions across conditions, validating the manipulation.

For mentioning family ties, two questions were asked: "The tweet I saw mentioned a (brother/sister)." When answering whether the tweet mentioned a brother, those who saw the tweet in the brother condition agreed significantly more ($M = 6.34$, $F(2, 579) = 887$, $p < .001$) than those who saw the sister ($M = 1.53$) or I ($M = 1.44$) conditions. Similarly, when answering whether the tweet mentioned a sister, those who saw the tweet in the sister condition agreed significantly more ($M = 6.06$, $F(2, 579) = 523.64$, $p < .001$) than those who saw the brother ($M = 1.73$) or I ($M = 1.59$) conditions. Notably, participants in the "I" condition reported low agreement on both

questions, whether the tweet mentioned a brother ($M = 1.44$) or a sister ($M = 1.59$), confirming they correctly perceived the condition they were assigned to.

Study 5 - conditions

One mention and I	Four mentions and I
 Amanda @Amanda1 I just finished my lunch, and it was a good experience. If you are looking of having a special dinner with quality food, I'd suggest giving them a try! @tehr_food #goodeats#dinner#ad#nights 12:00 PM · Jun 1, 2021	 Amanda @Amanda1 I just finished my lunch, and it was a good experience. If you are looking of having a special dinner with quality food, I'd suggest giving them a try! @tehr_food @tehr_food @tehr_food @tehr_food #goodeats#dinner#ad#nights 12:00 PM · Jun 1, 2021
One mention and brother	Four mentions and brother
 Amanda @Amanda1 My brother and I just finished our lunch, and it was a good experience. If you are looking of having a special dinner with quality food, I'd suggest giving them a try! @tehr_food #goodeats#dinner#ad#nights 12:00 PM · Jun 1, 2021	 Amanda @Amanda1 My brother and I just finished our lunch, and it was a good experience. If you are looking of having a special dinner with quality food, I'd suggest giving them a try! @tehr_food @tehr_food @tehr_food @tehr_food #goodeats#dinner#ad#nights 12:00 PM · Jun 1, 2021
One mention and sister	Four mentions and sister
 Amanda @Amanda1 My sister and I just finished our lunch, and it was a good experience. If you are looking of having a special dinner with quality food, I'd suggest giving them a try! @tehr_food #goodeats#dinner#ad#nights 12:00 PM · Jun 1, 2021	 Amanda @Amanda1 My sister and I just finished our lunch, and it was a good experience. If you are looking of having a special dinner with quality food, I'd suggest giving them a try! @tehr_food @tehr_food @tehr_food @tehr_food #goodeats#dinner#ad#nights 12:00 PM · Jun 1, 2021

Web Appendix F1- Study 5

The average number of branded@mentions per tweet in our dataset is 0.25 (SD = 0.76), with a maximum of 16 branded@mentions. Male- and female-related family references, identified using LIWC, appear in an average of 2.99% of tweets for female-related terms (SD = 17.02%) and 3.24% of tweets for male-related terms (SD = 17.70%), with both categories having a minimum of 0 and a maximum of 1, indicating their presence in specific tweets. The average number of likes per tweet is 9,695.81 (SD = 55,030.66), and the average number of shares is 2,060.59 (SD = 19,289.65), with highly skewed distributions reaching maximum values of 2,500,000 likes and 1,300,000 shares. Additionally, the average number of views per tweet is 574,200.9 (SD = 5,140,306), with values ranging from a minimum of 1 to a maximum of 277,000,000 views, reflecting significant variation in tweet visibility. The average number of comments per tweet is 486.86 (SD = 6,403.69), with values ranging from a minimum of 1 to a maximum of 426,000 comments, highlighting the substantial variability in user interactions. On average, users in the dataset have approximately 1,530,005 followers (log-transformed mean = 11.96, SD = 2.52) and follow 3,370 accounts (log-transformed mean = 5.93, SD = 1.95). User bio characteristics reveal an average bio length of 11.65 words (log-transformed mean = 2.28, SD = 0.84), with 75.4% of users including a URL in their bios. Additionally, 53.4% of users are verified, and the average account age is 133 months (log-transformed mean = 4.78, SD = 0.58). Tweet-level features show an average tweet length of 108.04 characters (log-transformed mean = 4.32, SD = 0.96), and content length averages 1.23 hashtags (log-transformed mean = 0.26, SD = 0.47). Financial symbols appear in tweets with an average frequency of 1.02 per tweet (SD = 0.18), while 11.7% of tweets are sponsored, indicated by specific hashtags or URLs. Emotional content analysis reveals that tweets contain an average of 1.56% positive emotion words (SD = 3.84), 0.32% negative emotion words (SD = 1.51), 0.06% anxious words (SD = 0.56), 0.07% anger words (SD = 0.72), and 0.08% sad words (SD = 0.77). Additionally, tweets include health-related words (mean = 0.33, SD = 1.57), food-related words (mean = 0.31, SD = 1.81), religious words (mean = 0.38, SD = 1.98), technology-related words (mean = 1.46, SD = 3.95), lifestyle words (mean = 3.98, SD = 5.11), and political words (mean = 0.59, SD = 1.93).

[illegible]

Table 7a. Literature Review

Author	Role of Mentions	Type of Mentions		Dependent variable				Mediator	Moderator		Findings
	IV Control Variable	Branded	General	Like	Share	Comment	Retweet	IMI	Family	PKM	
Current Paper	✓	✓		✓	✓	✓	✓	✓	✓	✓	The effect of verification on engagement is positive, but this value is attenuated after the policy change
Daniels and Freeman, 2025, JM	✓		✓								General mentions increase significantly negative sentiment of the tweets.
Chung et al., 2023, JCR	✓		✓	✓							The higher number of mentions in a post lead to lower engagement.
Seigner et al., 2023, JBV	✓		✓	✓			✓				Tweets containing mentions generally reduce audience engagement.
Deng et al., 2021, IMM	✓		✓	✓			✓				Tweets containing mentions had a positive impact on engagement.
Valsesia et al., 2020, JMR	✓		✓	✓			✓				Increase in the number of mentions will positively increase engagement.
Li and Xie, 2019, JMR	✓		✓	✓			✓				The number of users mentions in tweets increase user engagement

Variable Name	Operationalization
<i>Dependent Variables</i>	
Engagement	The number of likes, shares, views, and comments a tweet receives.
<i>Independent Variable</i>	
Number of Branded@mentions	The count of branded@mentions in a tweet, signifying the use of direct brand tags.
<i>Moderator</i>	
Female Family References	The binary presence of female family-related references in a tweet. Measured using the Linguistic Inquiry and Word Count (LIWC) program to identify terms related to female family members (e.g., "mother," "daughter," "sister").
Male Family References	The binary presence of male family-related references in a tweet. Measured using the Linguistic Inquiry and Word Count (LIWC) program to identify terms related to male family members (e.g., "father," "son," "brother").
<i>User Profile - Controls</i>	
User Followers	The natural logarithm of the number of followers an account has, representing the user's social reach and credibility.
User Following	The natural logarithm of the number of accounts a user follows, representing the size of their network connections.
@Mentions in Bio	The natural logarithm of the number of @mentions in a user's profile bio, representing their promotional or networking tendencies.
Hashtags in Bio	The natural logarithm of the number of hashtags in a user's profile bio, reflecting promotional or thematic focus.
Bio Length	The natural logarithm of the total number of characters in a user's profile bio, representing its size.
URLs in Bio	The presence of URLs in a user's profile bio, signifying a professional or external link.
Verification Status	Whether a user has a verification badge, indicating authenticity and credibility.
Age (Months)	The natural logarithm of total age of the user's account in months, representing the user's tenure on the platform.
<i>Tweet - Controls</i>	

Sponsored	Whether a tweet includes promotional content, indicated by hashtags or URLs such as #Ad or #Sponsored.
Tweet Length	The natural logarithm of the total number of characters in a tweet, representing its textual size.
Financial Symbols	The natural logarithm of percentage of words in a tweet related to financial terms, reflecting an economic focus. (LIWC)
Tweet Hashtags	The natural logarithm of the number of hashtags in a tweet, indicating its thematic or promotional focus.
Tweet Date	The publication date of a tweet, used to control for temporal effects in engagement.
Positive Emotions	The percentage of words in a tweet are associated with positive emotions, reflecting its tone. (LIWC)
Negative Emotions	The percentage of words in a tweet are associated with negative emotions, reflecting its tone. (LIWC)
Anxious Emotions	The percentage of words in a tweet are associated with anxiety, reflecting the emotional tone. (LIWC)
Sad Emotions	The percentage of words in a tweet are associated with sadness, reflecting the emotional tone. (LIWC)
Anger Emotions	The percentage of words in a tweet associated with anger, reflecting its emotional tone. (LIWC)
Food Context	The percentage of words in a tweet related to food, meals, or dining, reflecting a culinary focus. (LIWC)
Health Context	The percentage of words in a tweet related to health, wellness, or medical topics, indicating a health-oriented focus. (LIWC)
Religious Context	The percentage of words in a tweet related to religion, faith, or spirituality, reflecting religious or spiritual themes. (LIWC)
Tech Context	The percentage of words in a tweet related to technology, gadgets, or innovation, indicating a technology focus. (LIWC)
Lifestyle Context	The percentage of words in a tweet related to daily life, hobbies, or personal interests, reflecting a lifestyle-oriented focus. (LIWC)
Politics Context	The percentage of words in a tweet related to political topics, government, or public policy, reflecting a political focus. (LIWC)

Table 9a. The effect of Branded@mentions on Likes, Shares, Views, and Comments

Variable	Model 1 (Likes)	Model 2 (Share)	Model 3 (Views)	Model 4 (Comments)
Branded@Mentions	-0.13***	-0.09***	-0.22***	-0.36†
Female Family References	0.31**	0.23*	0.37**	-0.05
Branded@Mentions × Female Family Reference	-0.39*	-0.47**	-0.42**	-0.00
Male Family References	0.72**	0.58***	0.61***	0.65***
Branded@Mentions × Male Family References	-0.30**	-0.40***	-0.27**	-0.15
Ln Followers	0.20***	0.17***	0.14***	0.24***
Ln Following	-0.02*	0.01	-0.04***	-0.01
Ln Bio length	-0.20***	-0.19***	0.00	-0.14***
Ln Age	-0.30***	-0.20***	-0.17***	-0.36***
Ln Bio Mentions	-0.16***	-0.35***	-0.28***	-0.27***
Ln Bio Hashtags	-0.11***	-0.15***	-0.17***	-0.14***
URL bio	-0.25***	-0.12**	-0.24***	-0.23***
Verification status	0.22***	0.31***	0.51***	0.13**
Ln Tweet Length	-0.25***	-0.18***	-0.18***	-0.08***
Ln Tweet Hashtag	-0.79***	-0.63***	-0.67***	-0.65***
Ln Financial Symbol	0.24*	1.02***	1.32***	1.58***
Tweet Publication Date	0.00***	0.00***	0.00***	0.00***
Is sponsored	-0.57***	-0.44***	-0.16**	-0.39***
Positive Emotion	0.02***	0.01	0.01	0.01*
Negative Emotion	-0.01	-0.02	0.04	0.05†
Anxious Emotion	-0.01	0.02	-0.16***	-0.14***

Anger Emotion	0.12**	0.12**	0.05	0.04
Sad Emotion	-0.01	0.03	-0.06	0.11**
Food context	0.00	0.00	-0.01	-0.03***
Health Context	-0.02	-0.04***	-0.03**	-0.01
Religious Context	0.05***	0.13***	-0.01	0.12***
Tech Context	-0.01 [†]	-0.01	0.00	0.00
Lifestyle Context	-0.02***	-0.03***	0.01**	-0.03***
Politics Context	0.05***	0.07***	0.03**	0.16***
R squared	0.011	0.013	0.006	0.025

Notes: The dependent variable is the number of Likes and Shares of tweet *i* of user *j* at time *t*. Significance levels: [†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Web Appendix J (Potential Moderator)

Persuasion Knowledge as Moderator

The Moderating Role of Persuasion Knowledge Level

Individuals with higher levels of persuasion knowledge are more likely to recognize persuasive or manipulative attempts in marketing content. Persuasion knowledge (Friestad and Wright 1994) enables individuals to identify and evaluate marketers' tactics critically. Research shows that consumers with higher persuasion knowledge are more adept at interpreting promotional cues and are more likely to attribute ulterior motives to these tactics (Kirmani and Zhu, 2007; Boerman et al., 2017). This heightened awareness often leads them to scrutinize content for manipulative intent, resist persuasion attempts, and form more critical evaluations of both the message and its source (Campbell and Kirmani, 2000; Eisend and Tarrahi, 2022).

As hypothesized, branded@mentions can increase inferences of manipulative intent (IMI), especially as frequency increases. Frequent branded@mentions serve as explicit cues signaling promotional intent, making the persuasive nature of the content more salient. While followers with lower persuasion knowledge may overlook or fail to recognize these cues, those with higher persuasion knowledge are more likely to view frequent branded@mentions as intentional efforts to influence their attitudes or behaviors. This heightened sensitivity amplifies their perceptions of manipulative intent, leading to stronger negative reactions. For followers with lower persuasion knowledge, the increase in branded@mentions may not trigger the same critical evaluation. These individuals are less likely to engage in source derogation nor recognize the manipulative nature of frequent branded@mentions (Mukherjee et al., 2022). Consequently, their inferences of manipulative intent remain lower as the number of branded@mentions increases.

Building on these insights, we propose that persuasion knowledge levels in followers moderate the negative effect of branded@mentions on inferences of manipulative intent (IMI), such that individuals with higher persuasion knowledge levels will exhibit stronger inferences of manipulative intent as the number of branded@mentions increases, whereas individuals with lower persuasion knowledge levels will exhibit weaker inferences. Formally, we hypothesize:

Hypothesis: The effect of branded@mentions on IMI is moderated by followers' persuasion knowledge levels, such that the positive effect of branded@mentions on IMI will be stronger for individuals with higher persuasion knowledge than those with lower levels.

Experimental test of the hypothesis

In this study, we investigate how persuasion knowledge (PK) moderates the relationship between the number of branded@mentions and inferences of manipulative intent, as outlined in Hypothesis 4. Specifically, this study explores whether individuals with higher PK are more likely to perceive branded@mentions as manipulative, which in turn affects their engagement behaviors such as liking, sharing, commenting, and retweeting.

Method

A total of 224 participants were recruited through Prolific. After excluding 9 participants who failed the attention check, the final sample consisted of 215 participants (Mage=35; 53% Female, 44% Male, 1% Non-binary/Third gender; 65% White, 21% Black). Participants were randomly assigned to one of two conditions based on the frequency of branded@mentions (low: 1 branded@mentions vs. high: 4 branded@mentions; this time, the @mentions were placed in the middle of the tweet, see Appendix). Each participant viewed a social media post featuring branded@mentions in the assigned condition.

Following the post, participants completed measures assessing their likelihood to engage with the content (e.g., liking, commenting, sharing, or retweeting; Valsesia et al., 2020). They also answered questions assessing their inferences of manipulative intent (IMI; Matthes et al., 2011; $\alpha=.80$). We also measured brand prominence as a possible alternative mediator using a three-item scale (1 = strongly disagree, 7 = strongly agree) adapted from DelVecchio and Smith (2005). The items were: 'When I saw the tweet, it was easy to identify the brand,' 'When I saw the tweet, the brand stood out clearly,' and 'When I saw the tweet, the brand was prominently displayed. To capture persuasion knowledge, participants completed a validated PK scale (Bearden et al., 2001; $\alpha=.91$) measuring their sensitivity to manipulative marketing tactics. Manipulation check items ensured participants accurately perceived the number of branded@mentions in the post, and demographic data were collected (See Appendix).

Results

A one-way ANOVA revealed a significant effect of mention frequency on IMI, $F(1, 213) = 57.61, p < .001, \eta^2 = .212$. Participants exposed to four branded@mentions reported significantly higher manipulative intent ($M = 3.97, SD = 1.49$) than those exposed to just one mention ($M = 2.55, SD = 1.24$). To examine whether perceived manipulative intent (IMI) predicts participants' willingness to engage with the post, we ran a simple linear regression with IMI as the independent variable and engagement intention as the dependent variable. The results revealed a significant negative effect, $B = -0.33, t = -3.96, p < .001, R^2 = .064$. Higher perceptions of manipulative intent were associated with lower engagement.

Then, we tested whether the effect of branded-@mention frequency on engagement was mediated by perceived manipulative intent (IMI). Using PROCESS Model 4 (Hayes, 2018), we entered mention frequency as the independent variable (0 = one branded@mention, 1 = four branded@mentions), IMI as the mediator, and engagement as the outcome. As expected, increasing mention frequency significantly elevated perceived manipulative intent ($B = 1.42, p < .001, R^2 = .213$), and IMI in turn significantly reduced engagement ($B = -0.38, p < .001, R^2 = .076$). The indirect effect of mention frequency on engagement through IMI was significant (effect = $-0.54, 95\% \text{ CI } [-0.8934, -0.2515]$), indicating that increased perceptions of manipulation mediated the drop in engagement. The direct effect of mention frequency on engagement was non-significant ($B = 0.38, p = .184$), suggesting full mediation.

To further test the robustness of these findings and rule out brand prominence as an alternative explanation, we conducted a parallel mediation analysis using PROCESS Model 4 (Hayes, 2018). In this model, IMI and brand prominence were entered simultaneously as mediators of the relationship between branded@mention frequency and engagement. The analysis revealed that higher branded@mention frequency increased both perceived manipulative intent ($B = 1.42, p < .001, R^2 = .213$) and perceived brand prominence ($B = 1.04, p < .001, R^2 = .114$). However, when both mediators were included in the model predicting engagement, only IMI significantly predicted lower engagement ($B = -0.36, p < .001, R^2 = .086$), while brand prominence did not ($B = 0.13, p = .144$). The indirect effect through IMI was significant (effect = $-0.5171, 95\% \text{ CI } [-0.8463, -0.2306]$), whereas the indirect effect through brand prominence was not (effect = $0.1339, 95\% \text{ CI } [-0.0249, 0.3205]$). The total indirect effect remained significant ($-0.3833, 95\% \text{ CI } [-0.7688, -0.0210]$), while the direct effect of branded@mention frequency on engagement was not significant ($B = 0.2193, p = .472$).

To test whether the effect of branded@mention frequency on perceived manipulative intent and engagement depends on individuals' persuasion knowledge, we conducted a moderated mediation analysis using PROCESS Model 8 (Hayes, 2018). In this model, branded@mention frequency (X) was expected to increase perceived manipulative intent (IMI) (M), which would in turn reduce engagement (Y), and this indirect path was hypothesized to be stronger for individuals higher in persuasion knowledge (PKM) (W).

Results revealed a significant interaction between branded@mention frequency and PKM on IMI ($B = 0.39$, $p = .018$, $R^2 = .245$), indicating that individuals with higher persuasion knowledge responded more strongly to branded@mention repetition. At low PKM (-1 SD), the effect of mention frequency on IMI was significant ($B = 0.96$, $p < .001$), and it became even stronger at high PKM ($+1$ SD; $B = 1.84$, $p < .001$), suggesting that higher PKM amplifies sensitivity to perceived manipulation. IMI, in turn, significantly predicted lower engagement ($B = -0.40$, $p < .001$). The indirect effect of mention frequency on engagement via IMI was stronger for participants with high PKM (effect = -0.73 , 95% CI $[-1.1479, -0.3528]$) than for those with low PKM (effect = -0.38 , 95% CI $[-0.7124, -0.1356]$). The index of moderated mediation was significant (index = -0.16 , 95% CI $[-0.3017, -0.0165]$), confirming that persuasion knowledge intensifies the indirect effect.

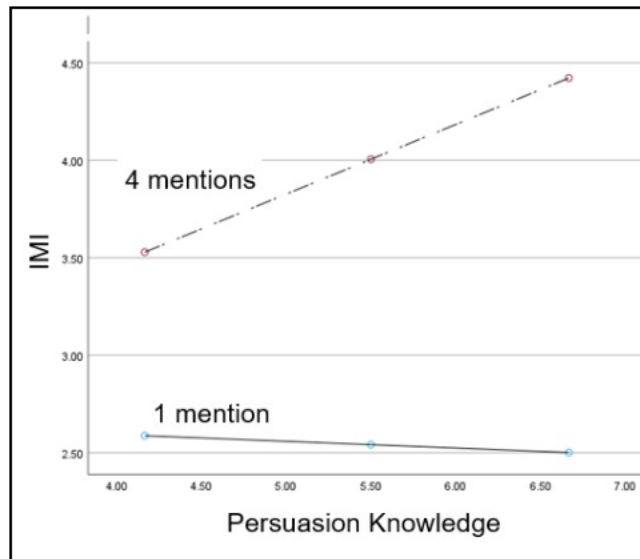
To test the robustness of our findings, we examined an alternative dependent variable: participants' overall impression of the post. Using PROCESS Model 8 (Hayes, 2018), we tested whether the indirect effect of branded@mention frequency on overall impression was again moderated by persuasion knowledge (PKM) through perceived manipulative intent (IMI).

Results showed that mention frequency and PKM significantly interacted to predict IMI ($B = 0.39$, $p = .018$, $R^2 = .245$). Conditional effects revealed that mention frequency significantly increased IMI at low PKM ($B = 0.96$, $p < .001$, 95% CI $[0.4491, 1.4793]$) and even more strongly at high PKM ($B = 1.84$, $p < .001$, 95% CI $[1.3307, 2.3578]$). When predicting overall impression, the effect of IMI was significant and negative ($B = -0.63$, $p < .001$, $R^2 = .277$). Importantly, the indirect effects of branded@mention frequency on overall impression through IMI were significant and moderated by PKM. At low PKM, the indirect effect was -0.61 (95% CI $[-0.98, -0.30]$), while at high PKM, the indirect effect was stronger at -1.17 (95% CI $[-1.6294, -0.7475]$). The index of moderated mediation was significant (index = -0.25 , 95% CI $[-0.4578, -0.0318]$).

Discussion

This study tested whether persuasion knowledge (PK) moderates the impact of branded@mention frequency on perceived manipulative intent (IMI) and engagement. Results confirmed that increasing mentions from one to four significantly raised IMI, which in turn reduced engagement, supporting a full mediation. Parallel mediation ruled out brand prominence as an alternative explanation: while prominence increased with mention frequency, it did not predict engagement beyond IMI. Critically, PK moderated the effect of mention frequency on IMI, those high in PK perceived repeated mentions as more manipulative, leading to stronger drops in engagement. A final test with overall impression as the outcome showed the same pattern, with significant moderated mediation. Overall, this study confirms that frequent branded@mentions backfire by increasing perceived manipulation, especially among consumers with higher persuasion knowledge.

Figure 8. Interaction of PK and number of mentions on IMI (Study 5)



Study PKM as Moderator – Conditions

One B@mention



Four B@mentions



References (Paper)

- Aaker, J. L. (1999). The malleable self: The role of self-expression in persuasion. *Journal of marketing research*, 36(1), 45-57.
- Abdul-Ghani, E., Kim, J., Kwon, J., Hyde, K. F., & Cui, Y. (2022). Love or like: gender effects in emotional expression in online reviews. *European Journal of Marketing*, 56(12), 3592-3616.
- Appel, G., Grewal, L., Hadi, R., & Stephen, A. T. (2020). The future of social media in marketing. *Journal of the Academy of Marketing science*, 48(1), 79-95.
- Barone, M. J., Rose, R., Miniard, P. W., & Manning, K. C. (1999). Enhancing the detection of misleading comparative advertising. *Journal of Advertising Research*, 39(5), 43-51.
- Bearden, W. O., Hardesty, D. M., & Rose, R. L. (2001). Consumer self-confidence: Refinements in conceptualization and measurement. *Journal of consumer research*, 28(1), 121-134.
- Brunner, M., & Ostermaier, A. (2019). Peer influence on managerial honesty: The role of transparency and expectations. *Journal of Business Ethics*, 154(1), 127-145.
- Boegershausen, J., Datta, H., Borah, A., & Stephen, A. T. (2022). Fields of gold: Scraping web data for marketing insights. *Journal of Marketing*, 86(5), 1-20.
- Boerman, S. C., Willemsen, L. M., & Van Der Aa, E. P. (2017). "This post is sponsored" effects of sponsorship disclosure on persuasion knowledge and electronic word of mouth in the context of Facebook. *Journal of Interactive Marketing*, 38(1), 82-92.
- Belanche, D., Casaló, L. V., Flavián, M., & Ibáñez-Sánchez, S. (2021). Understanding influencer marketing: The role of congruence between influencers, products and consumers. *Journal of Business Research*, 132, 186-195.
- Berger, J., Kim, Y. D., & Meyer, R. (2021). What makes content engaging? How emotional dynamics shape success. *Journal of Consumer Research*, 48(2), 235-250.
- Berendt, J., Uhrich, S., Borah, A., & Kilduff, G. J. (2024). EXPRESS: The Rivalry Reference Effect: Referencing Rival (vs. Non-Rival) Competitors in Public Brand Messages Increases Consumer Engagement. *Journal of Marketing Research*, 00222437241248414.

- Brehm, J. W. (1966). A theory of psychological reactance.
- Brown, L. (2014, May 15). Using The @Mention Function on Twitter. Going Social. <https://goingsocial.ca/using-the-mention-function-on-twitter/>
- Campbell, C., & Farrell, J. R. (2020). More than meets the eye: The functional components underlying influencer marketing. *Business Horizons*, 63(4), 469-479.
- Campbell, M. C., & Kirmani, A. (2000). Consumers' use of persuasion knowledge: The effects of accessibility and cognitive capacity on perceptions of an influence agent. *Journal of Consumer Research*, 27(1), 69-83.
- Cascio Rizzo, G. L., Berger, J., De Angelis, M., & Pozharliev, R. (2023). How sensory language shapes influencer's impact. *Journal of Consumer Research*, 50(4), 810-825.
- Chen, Y. J., & Kirmani, A. (2015). Posting strategically: The consumer as an online media planner. *Journal of Consumer Psychology*, 25(4), 609-621.
- Cao, Z., & Belo, R. (2023). Effects of explicit sponsorship disclosure on user engagement in social media influencer marketing. *Forthcoming, MIS Quarterly*.
- Chung, J., Ding, Y., & Kalra, A. (2023). I really know you: how influencers can increase audience engagement by referencing their close social ties. *Journal of Consumer Research*, 50(4), 683-703.
- Cotte, J., Coulter, R. A., & Moore, M. (2005). Enhancing or disrupting guilt: The role of ad credibility and perceived manipulative intent. *Journal of Business Research*, 58(3), 361-368.
- Cowley, E., & Barron, C. (2008). When product placement goes wrong: The effects of program liking and placement prominence. *Journal of advertising*, 37(1), 89-98.
- Chu, S. C., & Kim, Y. (2011). Determinants of consumer engagement in electronic word-of-mouth (eWOM) in social networking sites. *International journal of Advertising*, 30(1), 47-75.
- Daniels, M. E., & Wu, F. (2024). No Comments (from You): Understanding the Interpersonal and Professional Consequences of Disabling Social Media Comments. *Journal of Marketing*, 00222429241252842.
- Darke, P. R., & Ritchie, R. J. (2007). The defensive consumer: Advertising deception, defensive processing, and distrust. *Journal of Marketing research*, 44(1), 114-127.
- Deng, Q., Wang, Y., Rod, M., & Ji, S. (2021). Speak to head and heart: The effects of linguistic features on B2B brand engagement on social media. *Industrial Marketing Management*, 99, 1-15.
- De Veirman, M., Hudders, L., & Nelson, M. R. (2019). What is influencer marketing and how does it target children? A review and direction for future research. *Frontiers in psychology*, 10, 498106.
- DelVecchio, D., & Smith, D. C. (2005). Brand-extension price premiums: the effects of perceived fit and extension product category risk. *Journal of the Academy of Marketing Science*, 33, 184-196.
- Dilday, S. (2023, June 1). Influencer marketing strategy: How to set a smarter influencer marketing budget in 2024. Status Brand Blog. <https://brands.joinstatus.com/influencer-marketing-budget>
- Duhan, D. F., Johnson, S. D., Wilcox, J. B., & Harrell, G. D. (1997). Influences on consumer use of word-of-mouth recommendation sources. *Journal of the academy of marketing science*, 25, 283-295.
- Eisend, M., & Tarrahi, F. (2022). Persuasion knowledge in the marketplace: A meta-analysis. *Journal of Consumer Psychology*, 32(1), 3-22.

- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological review*, 109(3), 573.
- Evans, N. J., Wojdyski, B. W., & Grubbs Hoy, M. (2019). How sponsorship transparency mitigates negative effects of advertising recognition. *International Journal of Advertising*, 38(3), 364-382.
- Fossen, B. L. and Schweidel, D. A. (2019). Measuring the impact of product placement with brand-related social media conversations and website traffic. *Marketing Science*, 38(3), 481-499.
- Friestad, M., & Wright, P. (1994). The persuasion knowledge model: How people cope with persuasion attempts. *Journal of Consumer Research*, 21(1), 1-31.
- Geyser, W. (2024, July 10). The state of influencer marketing 2024: Benchmark report. Influencer Marketing Hub. <https://influencermarketinghub.com/influencer-marketing-benchmark-report/>
- Harmeling, C. M., Moffett, J. W., Arnold, M. J., & Carlson, B. D. (2017). Toward a theory of customer engagement marketing. *Journal of the Academy of marketing science*, 45, 312-335.
- Hayes, A. F. (2018). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. Guilford publications.
- Henkel, A. P., Boegershausen, J., Hoegg, J., & Lemmink, J. (2018). Discounting humanity: when consumers are price conscious, employees appear less human. *Journal of Consumer Psychology*, 28(2), 272-292.
- Holmes, Y. M., Beitelspacher, L. S., Hochstein, B., & Bolander, W. (2017). "Let's make a deal:" Price outcomes and the interaction of customer persuasion knowledge and salesperson negotiation strategies. *Journal of Business Research*, 78, 81-92.
- Hmurovic, J., Lamberton, C., & Goldsmith, K. (2023). Examining the efficacy of time scarcity marketing promotions in online retail. *Journal of Marketing Research*, 60(2), 299-328.
- Jain, S. P., & Posavac, S. S. (2004). Valenced comparisons. *Journal of Marketing Research*, 41(1), 46-58.
- Jonca, M. (2024, July 11). Instagram mentions: What they are and how to use them in marketing. Brand24. Retrieved October 4, 2024, from <https://brand24.com/blog/instagram-mentions/>
- Johar, G. V., & Simmons, C. J. (2000). The use of concurrent disclosures to correct invalid inferences. *Journal of Consumer Research*, 26(4), 307-322.
- Kapoor, P., Balaji, M. S., & Maity, M. (2024). Game on: Enhancing Customer Engagement Through Influencers' Gamified Messages. *Journal of Travel Research*, 00472875241289565.
- Karagür, Z., Becker, J. M., Klein, K., & Edeling, A. (2022). How, why, and when disclosure type matters for influencer marketing. *International Journal of Research in Marketing*, 39(2), 313-335.
- Keyhole. (2024). Tracking social mentions: A comprehensive guide. Keyhole. Retrieved October 4, 2024, from <https://keyhole.co/blog/tracking-social-mentions/>
- Kidwell, B., Hardesty, D. M., Murtha, B. R., & Sheng, S. (2011). Emotional intelligence in marketing exchanges. *Journal of Marketing*, 75(1), 78-95.
- Kirmani, A., & Zhu, R. (2007). Vigilant against manipulation: The effect of regulatory focus on the use of persuasion knowledge. *Journal of Marketing Research*, 44(4), 688-701.
- Khamis, S., Ang, L., & Welling, R. (2017). Self-branding, 'micro-celebrity' and the rise of social media influencers. *Celebrity studies*, 8(2), 191-208.

- Lee, J. K., & Junqué de Fortuny, E. (2022). Influencer-generated reference groups. *Journal of Consumer Research*, 49(1), 25-45.
- Li, X., Chan, K. W., & Kim, S. (2019). Service with emoticons: How customers interpret employee use of emoticons in online service encounters. *Journal of Consumer Research*, 45(5), 973-987.
- Leung, F. F., Gu, F. F., Li, Y., Zhang, J. Z., & Palmatier, R. W. (2022). Influencer marketing effectiveness. *Journal of Marketing*, 86(5), 57-75.
- Leung, F. F., Gu, F. F., & Palmatier, R. W. (2022). Online influencer marketing. *Journal of the Academy of Marketing Science*, 50(2), 226-251.
- Li, Y., & Xie, Y. (2020). Is a picture worth a thousand words? An empirical study of image content and social media engagement. *Journal of marketing research*, 57(1), 1-19.
- Libai, B., Rosario, A. B., Beichert, M., Donkers, B., Haenlein, M., Hofstetter, R., ... & Zhang, L. (2025). Influencer marketing unlocked: Understanding the value chains driving the creator economy. *Journal of the Academy of Marketing Science*, 1-25.
- Lunardo, R., & Roux, D. (2015). In-store arousal and consumers' inferences of manipulative intent in the store environment. *European Journal of Marketing*, 49(5/6), 646-667.
- Matthes, J., Wirth, W., Schemer, C., & Kissling, A. K. (2011). I see what you don't see. *Journal of Advertising*, 40(4), 85-100.
- Moradi, M., Dass, M., Arnett, D., & Badrinarayanan, V. (2024). The time-varying effects of rhetorical signals in crowdfunding campaigns. *Journal of the Academy of Marketing Science*, 52(2), 370-398.
- Mukherjee, P., Dutta, S., & De Bruyn, A. (2022). Did clickbait crack the code on virality?. *Journal of the Academy of Marketing Science*, 50(3), 482-502.
- Pan, M., Blut, M., Ghiassaleh, A., & Lee, Z. W. (2024). Influencer marketing effectiveness: A meta-analytic review. *Journal of the Academy of Marketing Science*, 1-27.
- Pezzuti, T., & Leonhardt, J. M. (2023). What's not to like? Negations in brand messages increase consumer engagement. *Journal of the Academy of Marketing Science*, 51(3), 675-694.
- Pancer, E., Chandler, V., Poole, M., & Noseworthy, T. J. (2019). How readability shapes social media engagement. *Journal of Consumer Psychology*, 29(2), 262-270.
- Pennebaker, J. W., Boyd, R. L., Jordan, K., & Blackburn, K. (2015). The development and psychometric properties of LIWC2015.
- Rubin, V. L. (2022). Manipulation in marketing, advertising, propaganda, and public relations. In *Misinformation and Disinformation: Detecting Fakes with the Eye and AI* (pp. 157-205). Cham: Springer International Publishing.
- Shewale, R. (2024, Feb 19). How much do influencers make in 2024 (Updated). DemandSage.
<https://www.demandsage.com/how-much-do-influencers-make/>
- Shen, P., Nie, X., & Tong, C. (2025). Does disclosing commercial intention benefit brands? Mediating role of perceived manipulative intent and perceived authenticity in influencer hidden advertising. *Journal of Research in Interactive Marketing*, 19(4), 673-693.
- Schweidel, D. A., Foutz, N. Z., & Tanner, R. J. (2014). Synergy or interference: The effect of product placement on commercial break audience decline. *Marketing Science*, 33(6), 763-780.

- Singh, J., Crisafulli, B., & Xue, M. T. (2020). 'To trust or not to trust': The impact of social media influencers on the reputation of corporate brands in crisis. *Journal of Business Research*, 119, 464-480.
- Simpson, P. and Strohm, L. K. (2004). Gender differences: emotional expression and feelings of personal inauthenticity. *Journal of Applied Psychology*, 89(4), 715-721.
- Seigner, B. D. C., Milanov, H., Lundmark, E., & Shepherd, D. A. (2023). Tweeting like Elon? Provocative language, new-venture status, and audience engagement on social media. *Journal of Business Venturing*, 38(2), 106282.
- Stojkov, D. (2024, October 11). The influencer size that delivers best ROI [Report]. Net Influencer. https://www.netinfluencer.com/emplifi-report-how-to-budget-for-influencer-marketing/?utm_source=tldrmarketing
- Sullivan, J. H., Warkentin, M., & Wallace, L. (2021). So many ways for assessing outliers: What really works and does it matter?. *Journal of Business Research*, 132, 530-543.
- Tian, Z., Dew, R., & Iyengar, R. (2024). Mega or micro? Influencer selection using follower elasticity. *Journal of Marketing Research*, 61(3), 472-495.
- Unnava, V., & Aravindakshan, A. (2021). How does consumer engagement evolve when brands post across multiple social media?. *Journal of the Academy of Marketing Science*, 49(5), 864-881.
- Valsesia, F., Proserpio, D., & Nunes, J. C. (2020). The positive effect of not following others on social media. *Journal of Marketing Research*, 57(6), 1152-1168.
- Villanova, D., & Matherly, T. (2024). For shame! Socially unacceptable brand mentions on social media motivate consumer disengagement. *Journal of Marketing*, 88(2), 61-78.
- Wang, L., Chan, E. Y., Chen, H., Lin, H., & Shi, X. (2022). When the "charm of three" fades: Mental imagery moderates the impact of the number of ad claims on persuasion. *Journal of Consumer Psychology*, 32(3), 484-491.
- Wiles, M. A., & Danielova, A. (2009). The worth of product placement in successful films: An event study analysis. *Journal of marketing*, 73(4), 44-63.
- Wies, S., Bleier, A., & Edeling, A. (2023). Finding goldilocks influencers: How follower count drives social media engagement. *Journal of Marketing*, 87(3), 383-405.
- Wojdyski, B. W. (2016). The deceptiveness of sponsored news articles: How readers recognize and perceive native advertising. *American Behavioral Scientist*, 60(12), 1475-1491.
- Wu, Y., Nambisan, S., Xiao, J., & Xie, K. (2022). Consumer resource integration and service innovation in social commerce: the role of social media influencers. *Journal of the Academy of Marketing Science*, 50(3), 429-459.
- Xu, P., & Liu, D. (2019). Product engagement and identity signaling: The role of likes in social commerce for fashion products. *Information & Management*, 56(2), 143-154.
- Yang, M., Ren, Y., & Adomavicius, G. (2019). Understanding user-generated content and customer engagement on Facebook business pages. *Information Systems Research*, 30(3), 839-855.
- Zhang, K., & Katona, Z. (2012). Contextual advertising. *Marketing Science*, 31(6), 980-994.
- Zor, O., Kim, K. H., & Monga, A. (2022). Tweets we like aren't alike: Time of day affects engagement with vice and virtue tweets. *Journal of Consumer Research*, 49(3), 473-495

References (Web Appendix)

- Bearden, W. O., Hardesty, D. M., & Rose, R. L. (2001). Consumer self-confidence: Refinements in conceptualization and measurement. *Journal of Consumer Research*, 28(1), 121–134.
- DelVecchio, D., & Smith, D. C. (2005). Brand-extension price premiums: the effects of perceived fit and extension product category risk. *Journal of the Academy of Marketing Science*, 33, 184-196.
- Matthes, J., Wirth, W., Schemer, C., & Kissling, A. K. (2011). I see what you don't see. *Journal of Advertising*, 40(4), 85–100.
- Valsesia, F., Proserpio, D., & Nunes, J. C. (2020). The positive effect of not following others on social media. *Journal of Marketing Research*, 57(6), 1152-1168.

SESSION 12.3: LEARNING BY DOING: RETAIL IMMERSIONS AND STUDENT-RUN AGENCIES

Moderators:

Ken Graham

Full Paper

Marketing Mondays: An Experiential Classroom Activity Enhancing Soft Skills and Strategic Marketing Principles

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Abstract

Employers have identified a growing deficiency of soft skills among recent college graduates that are needed in order for graduates to be successful in today's marketplace. The lack of these skills has increased since the Covid-19 pandemic due to students altering their social experiences, especially during their college career. The college classroom can be a place where students regain or enhance these critical skills that will support their future career. The marketing classroom provides a great opportunity to offer students experiential learning opportunities to teach and reinforce critical soft skills. This will be increasingly important with the increase in the use of generative artificial intelligence in the workplace which will intensify the need for employees to develop strong soft skills. We provide a review of an in-class experiential learning activity that encourages students in a Strategic Marketing class to apply marketing concepts while developing the soft skills such as critical thinking, teamwork, and communication skills. This activity can be replicated in the various marketing classes to support soft skills development while reinforcing important strategic marketing principles.

Introduction

In a world where the “Gen Z stare” is real (Lichtenberg, 2025), marketing professors are facing an incredibly daunting task to create a stimulating learning environment while also ensuring students graduate with the skills needed in a quickly evolving and highly competitive workplace (Shore & Dinning, 2023). The marketplace has identified a growing gap in career readiness and soft skills among recent college graduates entering the workforce. Employers have expressed a concern that recent college graduates are missing critical soft skills required to be successful working in today's competitive marketplace (Succi & Canovi, 2020). This concern is supported by a recent survey by the National Association of Colleges and Employers (NACE) 2025 Jobs Outlook that reported that 90% of recruiters are looking for new college graduates to have the ability to solve problems. The survey also reported 80% of recruiters seek job candidates with strong teamwork skills. The need for effective communication skills was also noted in this annual survey with more than 75% of those surveyed looking for effective communication skills from recent college graduates (NACE, 2025). Research has shown these are the skills that have negatively been impacted by the COVID-19 pandemic (Succi & Conovi 2020).

However, it is argued that traditional teaching methods are too focused on technical skills over practical application and create a “gap between employer expectations of new marketing graduates and the skills these graduates bring to the workplace (Alam, 2014).” To alleviate this disparity, universities must equip students with not just discipline knowledge but also graduates who are ready to “do marketing (Young, 2010).” These skills encompass both hard skills, based on marketing knowledge, and an understanding of the relationships between these marketing concepts, as well as the ability to see the big picture (Edmondson & Matthews, 2021). To be work-ready, marketing graduates also need to develop transferable skills, including the ability to solve problems, think critically, work in a team, and communicate effectively (Alam 2014; Razzouk et al., 2003). Furthermore, to ensure successful employment in the field, marketing curriculum should include communication skills, including public speaking, critical thinking, and teamwork collaboration. These crucial skills can be developed by applying creative marketing pedagogical assignments based upon experiential learning theory where marketing concepts are included as a part of the student analysis and in the group presentations to the class.

Young (2010) argues that marketing educators must “rethink the curriculum to include not just knowledge but also skills and attitudes; and focus on building an understanding of what it means to be a lifelong learner and building the related skills.” AACSB advocates for the integration of experiential learning into the curriculum, enabling students to learn through hands-on experiences (LeClair, 2018). By placing experiential learning at the center of

marketing education, students learn to connect theory to practice and are better equipped to navigate a professional marketing position (LeClair, 2018). The need for higher education to embrace the teaching and assessment of soft skills is even more critical as the use of generative artificial intelligence (AI) becomes common in most work settings (AlAfnan et al., 2024). Soft skills support how students can navigate technological advances and changes they encounter in the workforce (Zahn et al., 2025). As marketing educators build the use of AI in their marketing pedagogy, the use of soft skills, such as critical thinking and communication skills will be necessary in order for students to access the output from the AI models to determine reliability and usefulness of the generative AI content (AlAfnan et al., 2024).

Employers and even policy makers are now looking to higher education to help fill in this gap between academic knowledge and practical skills (Chiu et al., 2024) to ensure graduates have the skills and knowledge the workforce demands. The marketing classroom allows an educator an environment where they can create a setting where students develop, practice, and enhance both hard and soft skills. Hard skills are those skills students can be taught and trained to have upon graduation (Balcar, 2016). They are more knowledge specific and, from a business perspective, focused on specific business principles and theories. Soft skills are transferable skills (Zahn et al., 2025) that are learned and can be impacted by attitude and situations (Balcar, 2016) and include critical reasoning skills, presentation skills, and collaborative teamwork skills. To successfully meet the needs of the marketplace, students must be able to utilize a variety of soft and hard skills developed from their curriculum acumen and engage in experiential assignments in the classroom. By applying experiential learning activities, the classroom offers students an environment to develop and enhance these skills which can then be replicated in a work environment with a manager and fellow employees.

Experiential Learning Theory and Outcomes

John Dewey's scholarly work on The Experiential Learning Theory (ELT) informed us that learning is best perceived as a process where students are engaged in that process to enhance their learning (Kolb & Kolb, 2005). The student learning experience is developed and modified from experiences and interactions the student has in the classroom (Kolb, 1984). Experiential learning is an active learning philosophy that emphasizes hands-on experiences, where students apply course concepts (Dryer & Schumann, 1993; Frontczak, 1998). As opposed to passive learning in a traditional classroom, students become co-producers who learn by doing (Miaskiewicz, 2024).

At the core of experiential education is allowing students to apply concepts through guided practice so that they can actively engage with the concept being taught (Young, 2002; Alam, 2014). Essentially, the faculty serves as a coach who enables students to connect abstract course concepts to real-world experiences (Frontczak, 1998), allowing for "both the contextual practice of skills and the demonstration of the application of theory (Shore & Dinning, 2023)." Experiential education activities can be diverse and include case studies and simulations, experimentation, role-playing, and consulting for real-world clients (Gremmler, 2000) and can include both group-based and individual learning activities (Philippa Hunter-Jones, 2012).

When tied to post-activity reflection, students can reflect on what was learned and relate it to other academic and life experiences (Gremmler, 2000; Young, 2002). Literature supports many advantages of experiential education in the academic classroom. These advantages can be categorized into three main areas: student enjoyment, learning outcomes, and transferable soft skills. Students find experiential exercises are more stimulating than marketing lectures because they are interesting and increase involvement (Philippa Hunter-Jones, 2012; McGrath, 2023; Bacon & Stewart, 2022). Additionally, they increase engagement because they are more challenging and they provide for more realism (O'Connor & Moran, 2024; Philippa Hunter-Jones, 2012).

A meta-analysis by Burch et al. (2019) found that experiential education increased learning outcomes. Learning is improved because experiential education encourages students to gain knowledge through active participation (Burch et al., 2019; Wynd, 1999) and the practical application of course concepts (Alfaro-Barrantes et al., 2021; Bacon & Stewart 2022; Grewal et al., 2025). This allows students to process existing and new knowledge to make new connections (Burch et al., 2019; Edmondson & Matthews, 2021), resulting in better comprehension, deeper understanding and improved knowledge retention (Grewal et al., 2025; Talafuse, 2022). As a high-impact practice in higher education, experiential education helps develop the soft skills needed post-graduation (Alfaro-Barrantes et al., 2021; Burch et al., 2019; McGrath, 2023). These soft skills include enhanced oral and written communication skills (Gremmler, 2000; Philippa Hunter-Jones, 2012), improved negotiation skills, and better critical thinking and problem-solving skills (Alvarez et al., 2015; Philippa Hunter-Jones, 2012). By addressing the

development of the whole person, experiential education can help bridge the gap between academic learning and employer expectations (Burch et al., 2019; McGrath, 2023).

Experiential Learning in the Marketing Classroom

Experiential education is not a new concept in the marketing classroom. Despite this teaching method being used in many classrooms, there have been concerns noted about the effectiveness of experiential learning in the marketing classroom and the need to distinguish between experience and experiential learning (Brennan, 2014). There is clear support in higher education of the value experiential learning brings to the classroom. There is an opportunity, specifically with the topic of soft skills, to expand research to support the experiential learning opportunities for all college students, including those in the marketing classroom.

Marketing is especially well-suited for experiential exercises, as they can be easily integrated into course concepts (Alam, 2014; Grewal et al., 2025). Marketing lends itself well to experiential activities, including client projects, case studies, role-plays, simulations, and experiments (Alam, 2014; Grewal et al., 2025). Research has shown experiential education to be effective across the marketing curriculum, encompassing areas such as marketing research (Bridges, 1999; Bhattacharya & Sheth, 1996), personal selling (Alvarez et al., 2015; Hunt & Laverie, 2004; Shaw, 2007), sales management (Young and Hawes, 2013), consumer behavior (Morgan & McCabe, 2012; Petkus, 2000; Titus & Petrosius, 1993), branding (Cracium & Corrigan, 2010), communication (O'Connor and Moran, 2024; Warren, 2012), services (Miaskiewicz, 2024; Fowler & Bridges, 2012; Gonzalez-Padron & Ferguson, 2015), digital marketing (Canhoto & Murphy, 2016; Newaz & Nilson, 2024), and marketing strategy (Perkus, 2000; Razzouk, Seitz, & Rizkallah, 2003). While it has been shown to be a valuable pedagogy for teaching marketing concepts (Edmondson & Matthews, 2021), much of the literature has focused on upper-level marketing classes (Alfaro-Barrantes et al., 2021).

Methodology

The academic community has reported the value experiential learning has on student learning outcomes. The scholarly research has demonstrated experiential learning increases student engagement when the student is challenged and feels supported by the professor (Kolb & Kolb, 2016). Recent research reports a need to continue to evolve to include new methods of experiential learning to grow and expand this research and possible enhanced student learning outcomes (Roberts, 2018).

This classroom innovation is based on experiential learning pedagogy and relies on created experiential marketing education modules that required students to collaborate in a team setting over a multi-week assignment. Classroom methods using teams are common when using experiential learning. Teams learn from experience and members learn by observing the experience of other team members (Kayes et al., 2005). Kayes et al. (2005) also support the use of teams when they discuss Theodore Mills' model for team learning and the stages teams will advance as they learn to handle more complex issues.

The focus of the pedagogy in this paper was to create unique weekly team collaborations around a thematic product category each week. A benefit of this pedagogical approach was creating an assignment structure that created a sense of urgency to the assignment that allowed students to focus on and refine each week the ability to think creatively and strategically, apply marketing principles as a group, and meet a quick turnaround with a formal presentation to the class. This weekly repetition created an opportunity for students to conduct deeper learning where they felt they not only learned but also increased their enjoyment of the learning experience (Young et al., 2008). This in-class experiential learning activity serves as a relevant marketing education tool. Gray et al. (2012) discussed in their article about a need for more real-world education experiences to prepare students for the job market. "Papers are needed that focus on how to bring the real world into the classroom in new and exciting ways. (Gray et al., 2012)." This activity does this by developing a unique and creative pedagogy that also supports students learning important strategic marketing principles.

The assignment was a six-week assignment built into the learning modules for an in-person strategic marketing management capstone course that met three days a week in the 2024 spring semester. Each Monday over a six-week period, students participated in an in-class experiential learning assignment titled, "*Marketing Mondays*." The objective of the assignment was to randomly assign students to groups each week where the group selected a product item at random, collaborated and created a marketing strategy for that product, and then developed a presentation within a 30-minute time limit to present to the class. These classroom activities are focused on the soft skills of critical thinking, teamwork, and communication skills.

Classroom Project Concept

The professor visited local Dollar Tree retail stores in advance of each *Marketing Mondays* assignment. The goal was to find product items that could be grouped together around a theme. For example, health and beauty or food and beverage or seasonal items. The weekly items varied from widely used products to unique items that might have a limited consumer base. Each week, the goal was to have one product item that offered some humor or a challenge to the students in creating a marketing strategy for that item. Similar items could also be found in the “dollar” section at Target, or at Walmart or at a local grocery store.

The *Marketing Mondays* assignment commenced with students entering the classroom while a song tied to the week’s theme played in the background before drawing a random number. This number corresponded to a group for that session and aligned with the total classroom enrollment in each class. One week the theme was near the Easter holiday so the *Marketing Mondays* theme for that week was seasonal related. The theme title was “*A-Tisket. A-Tasket. What’s in Your Easter Basket?*” and used the famous Ella Fitzgerald song that aligned with this.

Once assembled in groups, the students sent one representative to the front of the room to select from a bag a products the professor selected for that week based on the theme. The last group to select an item could keep their product or “steal” a product from another group who would then swap their item with the last group. Once all groups selected their product, then the groups reconvened, and the professor started the timer. The class had 30 minutes to complete their analysis and a PowerPoint to present to the class.

The teams were asked to conduct a marketing analysis about the item they selected and present their results to the class. This fast strategy concept required students to build on their creative and critical thinking skills and develop extemporaneous speaking skills. The analysis of the product required presenting information on the following strategic marketing principles:

- Perform a Product Analysis
- Conduct a SWOT Analysis
- Overview of the Marketing Mix
- Define the Target Market(s) and Segmentation Strategy(s)
- Highlight Specific Sales Promotion Method(s)
- Discuss Advertising Platform(s)
- Describe Social Media and Digital Strategy(s)
- Identify any Co-branding, Events Sponsorship, or Influencer Relationships

Assignment Learning Outcomes

The pedagogy for this assignment supported these student learning outcomes (SLO) outlined in the syllabus.

- SLO(1): Analyze marketing problems and use strategic methods to identify market opportunities.
- SLO(2): Evaluate how strategic planning supports the overall marketing mix.
- SLO(3): Employ target marketing to reach customers using critical thinking and decision making.
- SLO(4): Demonstrate with oral and written assignments how to communicate strategic marketing plans, outcomes, and analysis review.

Initial Findings

The marketing pedagogy research includes a pre-assignment and post-assignment survey, along with qualitative data collected at the end of the semester from students enrolled in the course to measure their overall student learning. The assignment outlined for students a summary of the assignment objective, the rubric for grading the assignment, and a conceptual idea of the roles to be assigned to all group members. The group structure provides leadership and organizational management experience also as an outcome for the assignment. The professor used the assignment rubric to review each group’s presentation and announced the winner of that week’s assignment. Students received feedback from the professor about the winning team and to better understand the learning outcomes achieved by that group. This also provided the professor with an opportunity to evaluate the learning process and to find ways to make any needed improvements in the classroom (Young et al., 2008).

The authors used an empirical data collection method (Gaier, 2005) that used a five-point Likert scale survey to evaluate student knowledge and skills assessment specific to strategic marketing principles. The survey was developed using Qualtrics and distributed using a link on the class Canvas course for students to access the online survey. Students enrolled in MK 452-Strategic Marketing Management were asked to complete both the pre-assignment survey and the post-assignment survey. The data set is comprised of 25 students with 15 completing the pre-assignment survey and 13 completing the post-assignment survey.

The post-test survey revealed some lift in knowledge and confidence in students based on their participation in this experiential learning activity. Each of the five questions assessed saw an increase in student knowledge and confidence in the post-survey compared to the pre-survey. One of the largest gains among student respondents was with Q2 and their knowledge of evaluating strategic planning in the marketing mix. The pre-survey only had 7% of respondents reporting they were extremely knowledgeable while the post-survey showed an increase to 23% of respondents felt extremely knowledgeable.

Table 1 – Learning Outcome Improvements

Table 1. Learning Outcome Improvements				
	Pre-Survey Results (n=15)		Post-Survey Results (n=13)	
	Knowledge about analyzing marketing problems and using strategic methods to identify market opportunities.			
	n	%	n	%
Extremely or Very Knowledgeable	3	20%	5	43%
	Knowledge about evaluating how strategic planning supports the overall marketing mix opportunities.			
	n	%	n	%
Extremely or Very Knowledgeable	5	34%	11	100%
	Knowledge about how to employ target marketing to reach customers using critical thinking and decision making.			
	n	%	n	%
Extremely or Very Knowledgeable	6	40%	11	100%
	Confidence about demonstrating in oral and written assignments how to communicate strategic marketing plans, outcomes, and analysis review.			
	n	%	n	%
Extremely or Very Confident	6	40%	11	84%
	Confidence about to how to create a marketing plan in a group assignment for a specific marketing client that meets the client's strategic needs.			
	n	%	n	%
Extremely or Very Confident	6	40%	12	93%

Students also commented on the course evaluations with specific feedback about the *Marketing Mondays* in-class activity. Some of the comments include:

- “It is fun to have a hands-on learning experience.”
- “I really enjoyed the teamwork aspect of Marketing Mondays.”
- “The Marketing Mondays helped so much.”

- “The Marketing Mondays assignment was fun to do.”

Value to Marketing Education

The *Marketing Mondays* assignment allowed a marketing capstone course to create an in-class experiential learning experience where students used their marketing acumen to conduct a marketing strategy analysis and developed and enhanced soft skills college graduate needs to be competitive in the marketplace. This assignment builds on marketing pedagogy that integrates soft skills development of communication skills, teamwork and collaboration, and critical thinking with strategic marketing principles. Students were able to work and enhance their soft skills over a six-week period including the skills of public speaking and group collaboration.

The assignment can be applied to other marketing courses beyond a strategic marketing course and can even be expanded to other business or disciplines on campus. This pedagogy research has the potential to help academic units across a campus develop and reinforce soft skills for college students using the academic curriculum (Anthony & Garner, 2016). *Marketing Mondays* offers a pedagogical format that brings an experiential learning activity to the classroom in a unique and varied format to engage students in the learning process.

As we continue to balance the understanding, use, and application of generative artificial intelligence, marketing educators can explore ways AI can be integrated into this experiential learning activity. AI tools can enhance the communication skills students learn in the classroom (AlAfnan et al., 2024). The AI models can also be used to support collaboration and critical thinking.

Research Limitations and Future Research Opportunities

The sample size of this in-class activity was small due to the size of the public liberal arts university where the authors are on faculty. The authors plan to formalize this classroom activity and assessment tool and partner with other schools to develop a larger sample size of students to generate a mixed methods approach gathering qualitative and quantitative data. The research opportunity supports the need for more investment in the assessment of soft skills development and the pedagogical methods available to teach and reinforce these skills to college students before entering the workforce. The authors plan to modify the assignment to build in a generative AI component to support communication skills and critical thinking skills. There is a potential for bias in terms of the teaching styles and methods vary by faculty member and can influence the student learning experience and retention of the marketing principles. Despite this, there is opportunity with this research to use experiential learning as a method to develop soft skills. One area that can be expanded with future empirical data collection is for the survey results to be aligned with specific soft skills. This can offer a better assessment to connect the in-class activity to the specific soft skills the learning opportunity is seeking to develop for the students.

References

- AlAfnan, M. A., Dishari, S., & MohdZuki, S. F. (2024). Developing soft skills in the artificial intelligence era: Communication, business writing, and composition skills. *Journal of Artificial Intelligence and Technology*, 4(4), 305-317.
- Alam, S. A. (2014). Designing experiential learning projects for teaching marketing courses. *Atlantic Marketing Journal*, 3(3), 8.
- Alfaro-Barrantes, D., Vargas-Bogarín, J. D., & Fallas-Barrantes, R. (2021). Experiential learning projects: Engaging first and second year principles of marketing students. *Journal of Higher Education Theory and Practice*, 21(1), 115-124.
- Alvarez, C. M., Taylor, K. A., & Rauseo, N. A. (2015). Creating thoughtful salespeople: Experiential learning to improve critical thinking skills in traditional and online sales education. *Marketing Education Review*, 25(3), 233-243.
- Anthony, S., & Garner, B. (2016). Teaching Soft Skills to Business Students: An Analysis of Multiple Pedagogical Methods. *Business and Professional Communication Quarterly*, 79(3), 360–370.
- Bacon, D. R., & Stewart, K. A. (2022). What works best: A systematic review of actual learning in marketing and management education research. *Journal of Marketing Education*, 44(1), 6-24.

- Balcar, J. (2016). Is it better to invest in hard or soft skills? *The Economic and Labour Relations Review*, 27(4), 453-470.
- Bhattacharya C.B. & Sheth J.N. (1996) Instilling social responsibility through marketing research field projects. *Marketing Education Review* 6 (2): 23-31.
- Brennan, R. (2014). Reflecting on experiential learning in marketing education. *The Marketing Review*, 14(1), 97-108.
- Bridges, E. (1999). Experiential learning and customer needs in the undergraduate marketing research course. *Journal of Marketing Education*, 21(1), 51-59.
- Burch, G. F., Giambatista, R., Batchelor, J. H., Burch, J. J., Hoover, J. D., & Heller, N. A. (2019). A meta-analysis of the relationship between experiential learning and learning outcomes. *Decision Sciences Journal of Innovative Education*, 17(3), 239-273.
- Canhoto, A. I., & Murphy, J. (2016). Learning from simulation design to develop better experiential learning initiatives: An integrative approach. *Journal of Marketing Education*, 38(2), 98-106.
- Chiu, Y. L., Xu, L., Hsu, Y. T., & Wang, J. N. (2024). Soft skills unveiled: a comprehensive exploration of employer preferences and employability essentials. *Assessment & Evaluation in Higher Education*, 49(8), 1105-1120.
- Cracium, S. I., & Corrigan, C. L. (2010). An integrative experiential learning project in the undergraduate branding course: Creating a marketing department brochure. *Journal of Marketing Education* 32:116-127
- Crist, C. (2025, May 19). Over half of hiring managers say recent grads are unprepared for the workforce. *HigherEdDive.com*. <https://www.highereddive.com/news/recent-grads-unprepared-for-workforce/748040/>
- Dyer, B., & Schumann, D. W. (1993). Partnering knowledge and experience: The business classroom as laboratory. *Marketing Education Review*, 3(2), 32-39.
- Fowler, K., & Bridges, E. (2012). An experiential exercise in service environment design. *Journal of Marketing Education*, 34(2), 156-164.
- Frontczak, N. T. (1998). A paradigm for the selection, use and development of experiential learning activities in marketing education. *Marketing Education Review*, 8(3), 25-33.
- Grewal, D., Guha, A., Beccacece Saturnino, C., & Becker, M. (2025). The future of marketing and marketing education. *Journal of Marketing Education*, 47(1), 61-77.
- Gremler, D. D., Hoffman, K. D., Keaveney, S. M., & Wright, K. (2000). Experiential learning exercises in services marketing courses. *Journal of Marketing Education*, 22(1), 35-44.
- Gonzalez-Padron, T., & Ferguson, M. (2015). Using a service audit project for improving student learning in a service-marketing course. *Marketing Education Review*, 25(2), 127-140.
- Gray, D. M., Peltier, J. W., & Schibrowsky, J. A. (2012). The journal of marketing education: Past, present, and future. *Journal of Marketing Education*, 34(3), 217-237.
- Hunt, S. D., & Laverie, D. A. (2004). Experiential learning and the Hunt-Vitell theory of ethics: Teaching marketing ethics by integrating theory and practice. *Marketing Education Review*, 14(3), 1-14.
- Hunter-Jones, P. (2012). The continuum of learner disengagement: Ethnographic insights into experiential learning in marketing education. *Journal of Marketing Education*, 34(1), 19-29.

- Kayes, A. B., Kayes, D. C., & Kolb, D. A. (2005). Experiential learning in teams. *Simulation & gaming*, 36(3), 330-354.
- Kolb, D. A., Boyatzis, R. E., & Mainemelis, C. (2014). Experiential learning theory: Previous research and new directions. In *Perspectives on thinking, learning, and cognitive styles* (pp. 227-247). Routledge.
- Kolb, D. A. (2014). *Experiential learning: Experience as the source of learning and development*.
- Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of management learning & education*, 4(2), 193-212.
- Kolb, D. A. (2013). The process of experiential learning. In *Culture and processes of adult learning* (pp. 138-156). Routledge.
- Kolb, Alice Y. and Kolb, David A. (2017) "Experiential Learning Theory as a Guide for Experiential Educators in Higher Education," *Experiential Learning & Teaching in Higher Education: Vol. 1: No. 1, Article 7*.
- LeClair, L. M. (2018). Connecting through experiential learning. *AACSB Insights*, 4(2), 10–14.
- Lichtenberg, C. (2025). 12 Characteristics of Gen Z in 2025: Are you prepared for the next generation of consumers? *GWI Blog*. Retrieved from <https://www.aacsb.edu/insights/articles/2018/10/the-connective-power-of-experiential-learning>
- Marcus, B. H. (1979). Experiential learning in marketing: Synthesis and action for a capstone course. *Journal of Marketing Education*, 1(1), 13-18.
- McGrath, J. M. (2023). Administrators love experiential service learning, but what do students think? New empirical insights from a marketing capstone course. *Journal for Advancement of Marketing Education*, 31(1).
- Miaskiewicz, E. (2024). Promoting experiential learning in a services marketing class through the integration of service design. *Marketing Education Review*, 34(3), 235-245.
- Morgan, F. N., & McCabe, D. B. (2012). Learning why we buy: An experiential project for the consumer behavior course. *Journal of Marketing Education*, 34(3), 205-212.
- National Association of Colleges and Employers (NACE). (2025, January 28). The attributes employers look for on new grad resumes—and how to showcase them. <https://www.nacweb.org/about-us/press/the-attributes-employers-look-for-on-new-grad-resumes-and-how-to-showcase-them>
- Newaz, M. T., & Nilson, T. (2024). E-Service learning in a digital marketing course: Design, implementation, perceived effectiveness, challenges and way forward. *Journal for Advancement of Marketing Education*, 32(2).
- O'Connor, C., & Moran, G. (2024). The challenge of skill development through “experiencing” integrated marketing communications. *Higher Education, Skills and Work-Based Learning*, 14(3), 610-624.
- Petkus Jr, E. (2000). A theoretical and practical framework for service-learning in marketing: Kolb’s experiential learning cycle. *Journal of Marketing Education*, 22(1), 64-70.
- Razzouk, N., Seitz, V., & Rizkallah, E. G. (2003). Learning by doing: Using experiential projects in the undergraduate marketing strategy course. *Marketing Education Review*, 13(2), 35–41.
- Roberts, J. (2018). From the Editor: The Possibilities and Limitations of Experiential Learning Research in Higher Education. *Journal of Experiential Education*, 41(1), 3–7.

- Shaw, D. M. (2007). Building sales competencies through service learning. *Marketing Education Review*, 17(1), 35-41.
- Shore, A., & Dinning, T. (2023). Developing student's skills and work readiness: an experiential learning framework. *Journal of Work-Applied Management*, 15(2), 188-199.
- Succi, C., & Canovi, M. (2020). Soft skills to enhance graduate employability: comparing students and employers' perceptions. *Studies in Higher Education*, 45(9), 1834-1847.
- Talafuse, M. (2022). The effects of experiential learning on knowledge retention: An experiment. *International Journal of Marketing Education*, 34(4), 213-228.
- Titus P. A and Petroschius S. M (1993) Bringing consumer behavior to the workbench: An experiential approach. *Journal of Marketing Education* 15: 20-30.
- Warren, J. L. (2012). Does service-learning increase student learning? A meta-analysis. *Michigan Journal of Community Service Learning*, 18(2), 56-61.
- Wynd, W. R. (1989). An experiential approach to marketing education. *Journal of Marketing Education*, 11(2), 64-71.
- Young, M. R. (2010). Transforming the initial marketing education experience: An action learning approach. *Journal of Marketing Education*, 32(1), 13-24.
- Young, M. R. (2002). Experiential learning= hands-on+ minds-on. *Marketing Education Review*, 12(1), 43-51.
- Young, M. R., Caudill, E. M., & Murphy, J. W. (2008). Evaluating experiential learning activities. *Journal for Advancement of Marketing Education*, 13.
- Young, J. A., & Hawes, J. M. (2013). Using sales management students to manage a student salesforce: An innovative active learning project. *Marketing Education Review*, 23(1), 37-42.

Summary Brief

Mad Men and Women: Community-Engaged Learning Using Student Ad Agencies in an Undergraduate Integrated Marketing Communications Course

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This paper investigates the impact of a unique approach to student group formation in an undergraduate integrated marketing communications course utilizing live-client projects. Data were collected in the Spring 2023 with four clients and 32 students comprising eight student groups. Each student was assumed an advertising agency-specific role aligned with self-identified intellectual strengths, career interests, and job preferences. The student ad agency roles included creative director, account director, media specialist, and account planner. Working with community businesses, the students applied theoretical knowledge to real-world marketing promotion and communication challenges. The project culminated with a presentation of an Integrated Marketing Communications plan to the client at the end of the semester. The findings highlight the effectiveness of role-based team structures in fostering experiential learning, improving industry readiness, and bridging the gap between academic instruction and professional practice in advertising and marketing education.

Introduction

As today's business environment continually changes with the rapid introduction of advanced technologies, growing reliance on global supply chains, and an increased focus on business ethics and socially responsible organizations, modern business schools face complex challenges to produce graduates equipped to competently address these problems. One strategy many business schools have employed to ensure students are well-equipped to face the realities of the business world is the integration of real-world experiences into traditional business courses (Kenworthy-U'Ren, 2008). Many of these real-world experiences include community-engaged learning (CEL) projects. CEL is defined as "programs that incorporate classroom-to-community relationships and involve academically based, community-engaged courses where student learning takes place in partnership with a community organization or business" (Klein & Graham, 2025; p.34).

There is a growing body of business education literature that examines the use of CEL across business disciplines, including business communications (Blewitt et al., 2018), accountancy (Buckhaults & Fisher, 2011), management (Huang & Lin, 2017), marketing (Cadwallader et al., 2013), and business law (Burke, 2007). As a supplement to traditional business pedagogy, faculty utilize CEL to infuse real-world situations into the classroom to provide students with opportunities to apply business theories and concepts to solve common business problems (Makani & Rajan, 2016). CEL has been shown to have a positive impact on student learning (Wang & Calvano, 2018), on participating community businesses or organizations (Klein & Graham, 2025), and on higher education institutions as well (Pinion, 2018).

While CEL projects have proven to be beneficial, oftentimes, these types of projects involve students working in groups, which can be problematic. For the group work to be successful, students need to share positive attitudes, beliefs, and behaviors regarding the group work (Chapman et al., 2010). Pfaff and Huddleston (2003) identify several challenges that threaten the success of student groups, including individual members who do not fully contribute to the group effort or who disrupt team dynamics so that other team members are prevented from completing their work. In addition, they note team leaders who take over the project and limit the participation of other group members as a key challenge to group success. Other challenges to team success can stem from the care given by the instructor in assigning individual members to the group. Extant literature suggests ways of addressing some of these group issues include increasing individual group member accountability (Joyce, 1999), assigning specific roles to students on their teams (Pfaff & Huddleston, 2003), and balancing groups based on the skill level of individual members (Feichtner & Davis, 1984).

This paper discusses a CEL project that was executed in several sections of an undergraduate integrated marketing communications course at a comprehensive 4-year university in the Midwest in the Fall semester of 2023. In the course, student groups were organized as advertising agencies, where each group member was assigned a dedicated role within the agency. The remainder of this paper will provide a brief review of the relevant literature, followed by a description of the course design and its implementation, followed by a review of a discussion of the course outcomes and recommendations for faculty.

Experiential Learning Theory (ELT)

CEL is an experiential learning method grounded in Kolb's Experiential Learning Theory (ELT) (Kolb, 1984). ELT has six basic propositions that describe the tenants of experiential learning. These propositions underly Kolb's Experiential Learning Cycle (1984), which describes the process of experiential learning, including concrete experiences, reflective observations, abstract conceptualizations, and active experimentation. Concrete experiences include direct observations and participation. Reflective observations include reflection and considering feelings, reactions, observations, and judgments. Abstract conceptualizations include the application of concepts and information in the form of tentative hypotheses or generalized knowledge. Finally, active experimentation includes testing or putting into practice new knowledge that has been learned through the experiential learning process.

Client-based projects are among the more common experiential learning CEL projects used in business education. These projects allow students to address real-world marketing problems (Zhang & Scribner, 2024) and develop critical thinking and creativity skills (McDermott, 2012). In addition, students must develop skills working directly with clients, often having to interpret a client's perception of issues and the unforeseen complexity that is difficult to replicate in a classroom case analysis (Shanahan et al., 2021).

Project Design

The CEL experiential learning project was embedded into an elective undergraduate integrated marketing communication course for marketing majors in Spring semester of 2023. The course introduces students to the various theories, strategies, and tactics associated with marketing promotion. The key semester project includes market and target audience analysis, and the development of an integrated marketing communications plan, which develops student understanding of the role of promotion and the integrated nature of marketing planning. Students are expected to apply theoretical knowledge about marketing and strategic communications and design, develop, and execute cohesive marketing communication strategies across multiple media channels for a targeted audience.

In the class, students were grouped into eight advertising agency teams of four students per agency to research, develop, and execute an IMC strategy designed to target a specific audience via various media channels for a for a local company. Students apply concepts and theories discussed in class to this project, including advertising and marketing research methods, audience segmentation and targeting strategies, and applicable communications and consumer behavior theories.

Student Advertising Agency Project

To ensure each student advertising agency had a sufficient blend of skills and that students were personally motivated to participate in the project, a survey was conducted during the first week of classes. Students were provided an overview of the semester-long project they would be working on and that their student groups would function like an advertising agency, where each group member had clearly defined roles and responsibilities to the project. They were provided the advertising agency job descriptions for each available roles (creative director, account director, media specialist, and account planner). They were asked to rank the four positions in order of preference for roles that most aligned with their skill sets and personal and professional interests. After students completed the survey, the instructor assigned each student a role based on their first or second preference, time availability, and preferred workstyle. After the students were assigned roles, a process was used to allow students to self-select into agencies based on their roles, with the instructor assigning any remaining students to an agency.

Once the student agencies were formed, the students were provided with "client briefs" prepared by their instructor for each client company. To ensure the student agencies were motivated to engage in the client-based project, the student agencies were asked to rank the companies they would be most interested in taking on as their client in order of preference. The instructor then assigned the agencies to one of the four different clients, with the student agencies getting either their first or second choice of client to work with. During the third week of classes, the clients were invited to come to the class to provide first-hand information about their companies, to outline their

expectations for the project, and to meet the teams working on their account. The Student Agencies used this opportunity to ask clarifying questions and to exchange contact information with their clients.

The Clients

Clients for the CEL project were recruited from the Small Business Development Center (SBDC) housed within the University's College of Business Administration (CBA). For the Spring 2023, the SBDC identified four clients that were interested in working with the student groups to develop their marketing communications plans. These including a boutique hotel, a wine importer, an artisan woodworking studio, and a medical aesthetics spa.

Before the start of the semester, the instructor met and interviewed each client to gather relevant background information on the company and industry and help them identify achievable goals for the class project. This information was used in combination with relevant industry data to put together a descriptive client brief for each client project that outlined the primary project objectives, along with company and industry background information for the student advertising agencies.

Classroom Activities

The following sections detail the IMC Plan development process in the context of Kolb's Experiential Learning Cycle that is followed throughout the semester with the student advertising agencies. Throughout the semester, students have three milestone Agency Briefings. In these briefings, each agency meets with the instructor to provide a status update on their progress, discuss their strategy, outline challenges they are encountering, and receive feedback on how to refine their work before moving on to the next stage of the project.

Concrete Experience

At the beginning of the semester, the instructor presents the client-based project to the class and discusses that the student groups will operate like an advertising agency with dedicated roles based on the students' specialized skills. Early lecture sessions discuss how advertising agencies operate, and students are provided a detailed timeline for the Integrated Marketing Communications (IMC) Plan project, including milestone dates and project deliverables.

The course content coincides with the stages of IMC project development, so students receive weekly lectures, in-class assignments, quizzes, and examinations over the course content while simultaneously working on subsequent stages of the IMC Plan project deliverables.

Reflective Observation

Following their initial meeting with the course clients, students are asked to write a reflection on each client visit, their key takeaways from the client's visit, and the key points the client addressed with the class. Further, the student agencies work throughout the semester, leveraging new information learned from their course content lectures and external research to develop the key components of the IMC Plan project. The project is submitted in stages, as students acquire new knowledge as the class progresses.

Abstract Conceptualization

Following key stages of the IMC Plan project, each student agency schedules a formal Agency Briefing with their instructor. Three Agency Briefings are held, which are face-to-face meetings where the agencies present their current progress on the project and outline their current strategy, discuss any challenges they are having with the project, and receive direct feedback from their instructor. The first Agency Briefing is held after Week 4, the second after Week 5, and the third after Week 10.

These Agency Briefings are a mechanism for the teams to receive immediate and direct feedback on their project and advice on components of the project moving forward, in addition to written feedback they may receive on submitted work.

Active Experimentation

Following the Agency Briefings and after receiving any written feedback on submitted work, the agency teams then meet to adjust their strategy and reevaluate their IMC Plan. The role specialization becomes extremely relevant here, as each member will take feedback specific to their area of responsibility, e.g., creative direction (creative director), media (media specialist), background research (account specialist), or coordination with client-side data, or misalignment with client goals and objectives (account director).

As students progressively work through Kolb's Experiential Learning Cycle multiple times throughout the semester, they become more adept at recognizing their unique roles in the group and the value that they bring to the team.

Sentiment Analysis

At the end of the semester, each student was asked to complete a peer review for each member of their student agency, including an open-ended question that asked students to "please add any relevant commentary you would like to share regarding your experience working with your agency team." From this qualitative reflection, 160 individual student statements were coded and analyzed for sentiment. Of these 160 statements, 11 (7%) statements were neutral, 61 (38%) were negative in tone, and 88 (55%) were positive in tone.

From the textual analysis, six unique themes emerged that were descriptive of the students' experience. The themes included group dynamics, role clarity, team members, deliverables, and personal achievement. Figure 1 illustrates the distribution of these statements based on sentiment.

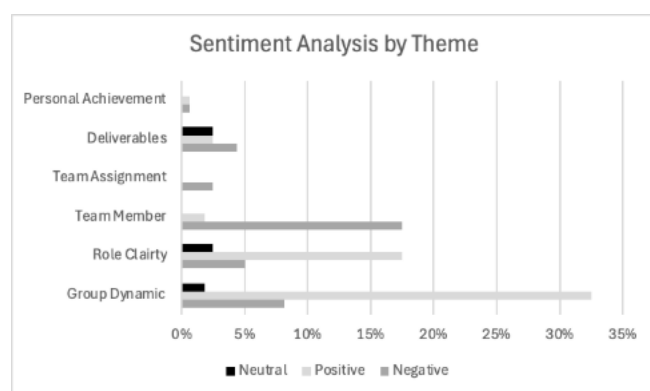


Figure 1 Sentiment analysis by theme

The vast majority of negative sentiment (46%) had to do with conflicts with one or more team members. Illustrative statements include:

"My only comment would be that some people are very strong willed, and want everything to be done their way."

"I tried to go through and edit things but was not able to stay up and wait for others to do their parts the night before it was due."

Similarly, the second highest percentage of negative comments (21%) were made regarding overall group dynamics. For example:

"This entire project was honestly incredibly frustrating due to the nature of our group as well as the overall effort put in by the members of the group."

"They didn't contribute 100% to this project and at some times it felt [we], were doing most of the work, or cared more about this project."

Consistent with the extant literature, students appreciated the clearly defined roles (32%) and how that benefited the overall group dynamics (59%). Positive sentiment for role clarity include statements such as:

"For the most part, everyone did their part and the final project turned out great!"

"I think everyone did a great job and did everything that was asked of them."

Similarly, quotes regarding the group dynamics include:

“This is probably the best group I have ever worked with on a group project.”

“Overall, I have enjoyed working with my group and I thought their was overall great team chemistry.”

Conclusion

This paper illustrates the effective use of CEL in a client-based project by creating student advertising agencies with group member role specialization in an undergraduate integrated marketing communications course. In this course, students are faced with unique clients that have very real marketing problems that need to be solved. Student teams are challenged to accept responsibility for their given roles and to develop critical thinking and creative problem-solving skills to navigate complex client demands and interpret client expectations.

Extant research has shown that CEL and client-based projects are effective in business education for growing students' skills in dealing with unstructured, real-world business problems (Chapman et al., 2010). Following Pfaff and Huddleston (2023), this paper illustrates how instructors can successfully integrate client-based group projects into their courses while maintaining a high degree of student engagement by carefully structuring student groups, increasing individual group member accountability (Joyce, 1999), assigning specific roles to students on their teams (Pfaff & Huddleston, 2003), and balancing groups based on the skill level of individual members (Feichtner & Davis, 1984).

References

- Blewitt, J. M., Parsons, A., & Shane, J. M. (2018). Service learning as a high-impact practice: Integrating business communication skills to benefit others. *Journal of Education for Business*, 93(8), 412-419.
- Buckhaults, J., & Fisher, D. (2011). Trends in accounting education: Decreasing accounting anxiety and promoting new methods. *Journal of Education for Business*, 86(1), 31-35.
- Burke, D. D. (2007). Service learning: Opportunities for legal studies in business. *J. Legal Stud. Educ.*, 24, 129.
- Cadwallader, S., Atwong, C., & Lebard, A. (2013). Proposing community-based learning in the marketing curriculum. *Marketing Education Review*, 23(2), 137-150.
- Chapman, K. J., Meuter, M. L., Toy, D., & Wright, L. K. (2010). Are student groups dysfunctional? Perspectives from both sides of the classroom. *Journal of Marketing Education*, 32(1), 39-49.
- Feichtner, S. B., & Davis, E. A. (1984). Why some groups fail: A survey of students' experiences with learning groups. *Organizational Behavior Teaching Review*, 9(4), 58-73.
- Huang, C. K., & Lin, C. Y. (2017). Flipping business education: Transformative use of team-based learning in human resource management classrooms. *Journal of Educational Technology & Society*, 20(1), 323-336.
- Joyce, W. B. (1999). On the free-rider problem in cooperative learning. *Journal of Education for Business*, 74(5), 271-274.
- Kenworthy-U'Ren, A. L. (2008). A decade of service-learning: A review of the field ten years after JOBE's seminal special issue. *Journal of Business Ethics*, 81, 811-822.
- Klein, L., & Graham, K. In Eklund, M., & Graham, K. (Eds.), *Chapter 3 - Implementation of a Community-Engaged Learning Program: An Institutional Perspective* in High-Impact Teaching Practices in Business Education (vol. 1). Cheltenham Gloucestershire: Edward Elgar Publishing. (<https://doi.org/10.4337/9781035315079>).
- Kolb, D. (1984). *Experiential Learning: Experience as a Source of Learning and Development*.

- Makani, B., & Rajan, M. N. (2016). Understanding business concepts through application: The pedagogy of community-engaged learning. *Journal Of Business & Educational Leadership*, 6(1).
- McDermott, M. (2012). Teaching Critical Thinking To Undergraduates Using Client-Based Projects. *Ethics & Critical Thinking Journal*, 2012(3).
- Pfaff, E., & Huddleston, P. (2003). Does it matter if I hate teamwork? What impacts student attitudes toward teamwork. *Journal of Marketing Education*, 25(1), 37-45.
- Pinion, T. L. (2018). Undergraduate engagement is the engine that drives fund-raising. *Journal of Education Advancement & Marketing*, 3(2), 188-197.
- Shanahan, D. E., Palmer, L. H., & Salas, J. (2021). Achieving scaled and sustained use of client-based projects in business school marketing education: A proposed suprastructure. *Journal of Marketing Education*, 43(1), 59-74.
- Wang, L., & Calvano, L. (2018). Understanding how service learning pedagogy impacts student learning objectives. *Journal of Education for Business*, 93(5), 204-212.
- Zhang, S., & Scribner, L. L. (2024). Would you rather... a simulation or a client-based project? A case study of experiential learning methods in digital marketing analytics courses. *Journal of Marketing Education*, 46(3), 258-275.

SESSION 12.4: POLICY SIGNALS, PUBLIC TRUST, AND MISSION CAPACITY

Moderators:

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Summary Brief

Navigating Social Inflation: Brand Trust Challenges and Strategic Responses in Disaster-Prone Markets and Beyond

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Abstract

This summary brief examines the erosion of brand trust in the U.S. home insurance industry amid the growing influence of social inflation, a phenomenon fueled by public skepticism, legal activism, and shifting societal expectations. We argue that trust erosion stems not only from operational failures but also from a deeper misalignment between brand messaging and strategic actions, particularly regarding claim denials and market exits in high-risk areas. While consumers are often assured, they are “like a good neighbor...,” such messaging increasingly clashes with insurers’ retreat from vulnerable regions, intensifying perceptions of betrayal. Drawing on branding, crisis communication, and stakeholder theory, we propose that insurers must recalibrate communication, segment stakeholders by trust vulnerability, and embrace transparency as a strategic imperative. This summary brief outlines how social inflation amplifies brand distrust and offers implications for insurers, regulators, and public watchdogs, concluding with directions for future research.

Introduction

While consumers commonly understand general inflation as rising prices driven by economic forces, a less visible but increasingly disruptive phenomenon is social inflation, the escalating costs of insurance claims fueled by legal shifts, aggressive litigation, and changing societal expectations of corporate responsibility (NAIC, 2023; Boisvert et al., 2024). This issue has become particularly urgent in the homeowners’ insurance market, where insurers face mounting claims from climate-driven disasters like wildfires in California and hurricanes in Florida, combined with rising litigation costs and public scrutiny.

Insurers’ strategic responses, exiting high-risk markets or restricting coverage, make financial sense but carry steep reputational costs. When brands built on trust-oriented messaging, like “Like a good neighbor...”, withdraw support during crises, the resulting disconnect damages brand equity and accelerates brand trust erosion.

This summary brief examines how social inflation interacts with brand trust erosion in the home insurance market. It argues that the damage stems not only from financial pressures but also from a growing misalignment between brand promises and operational realities. Applying institutional theory, signaling theory, and perceived risk theory, the brief explores how insurers’ risk management decisions clash with consumer expectations and offers a strategic framework for managing brand trust in this volatile environment.

Background and Conceptual Foundation

Historical Roots and Drivers of Social Inflation

Social inflation refers to the rising costs of insurance claims driven by societal factors such as shifting legal standards, cultural expectations, and litigation funding. From a macroeconomic perspective, rising costs of healthcare, labor, and repairs have amplified juror sympathy toward plaintiffs, resulting in larger settlements and verdicts. This shift reflects growing public intolerance toward perceived corporate indifference during times of financial strain, directly influencing both litigation outcomes and consumer trust in insurance brands.

In the 2020s, this phenomenon has accelerated. The public increasingly views lawsuits against insurers as a David vs. Goliath struggle (Kessler, 2021). Jury awards have surged, fueled by the growth of third-party litigation funding (TPLF), where external investors finance lawsuits in exchange for a share of the settlement (Moorecraft,

2020). TPLF has become a multiplier of social inflation's effects, driving up costs and increasing the volatility of claims.

The Intersection with Natural Disasters

The crisis is further amplified by the rising frequency and intensity of natural disasters. In 2023 alone, the U.S. experienced 28 separate billion-dollar weather events, the highest number on record (NOAA, 2024). Wildfires, hurricanes, and floods have particularly strained insurance markets in California and Florida. As a result, many insurers have shifted from simply adjusting premiums to withdrawing from high-risk markets altogether (Todoroff, 2024). Those who remain recalibrate coverage limits, restrict policies, or raise premiums dramatically.

Adding pressure, supply chain disruptions have driven up the cost of repairs, construction, and materials (Rodeck, 2024), further inflating claim values. Policyholders in high-risk regions face reduced access to affordable coverage. In some cases, even homes with roofs over 15 years old are now deemed uninsurable (PACE, 2022).

State-Level Regulatory Constraints

Because insurance is regulated at the state level, insurers also navigate a patchwork of regulatory environments. In California, strict limits on premium increases have led major insurers such as State Farm, Allstate, and Farmers to withdraw significant portions of their homeowner insurance portfolios (Darmiento, 2024). In Florida, the crisis has been worsened by rampant insurance fraud related to roofing claims. Although Florida accounted for only 8% of national homeowners' claims in 2019, it represented a staggering 76% of all related litigation (Friedlander, 2022).

In response, insurers are fortifying financial reserves and legal defenses (Stephenson, 2021). Some exit high-risk markets; others recalibrate underwriting strategies or pursue aggressive litigation management. These responses are not merely financial decisions but are deeply intertwined with regulatory constraints, climate risk, and escalating legal exposures, all of which contribute to the dynamics of social inflation.

Theoretical Frameworks

Institutional Theory

Institutional theory explains how organizations adapt to external pressures beyond just financial efficiency (Scott, 1987; DiMaggio & Powell, 1983). Insurers' decisions are shaped by three key forces: Coercive pressure from regulators, such as California's mandate requiring coverage expansion in wildfire zones despite actuarial risks (Nguyen, 2024).

Normative pressure from consumers and society, reinforced by longstanding brand promises like "You're in good hands" or "Like a good neighbor" (Wolfrom, 2025). Failing to meet these expectations risks public backlash and trust erosion.

Mimetic pressure where firms imitate competitors' exits from high-risk markets, as seen with State Farm, Allstate, and Farmers withdrawing from California and Florida (Jacobson, 2024).

Institutional theory highlights that these decisions are not solely driven by actuarial models but by the need to navigate regulatory demands, public expectations, and competitive behavior, all contributing to the brand trust dilemma in the context of social inflation.

Perceived Risk Theory

Perceived risk theory posits that consumer decisions are shaped by subjective fears of potential loss (Bauer, 1960; Cox, 1967). For insurance, this includes financial, functional, psychological, and social risks (Featherman & Pavlou, 2003). When insurers raise premiums, deny claims, or exit markets, consumers, especially in disaster-prone areas, experience heightened feelings of vulnerability (Fellowes-Granda et al., 2025). Insurance brands traditionally mitigate perceived risk through reassuring slogans like "You're in good hands" or "Like a good neighbor." However, when operational decisions contradict these signals, perceived risk spikes leading to brand distrust, switching behavior, and widespread consumer dissatisfaction.

Signaling Theory

Signaling theory addresses how companies communicate quality and reliability when consumers cannot directly evaluate the product (Spence, 2002; Connelly et al., 2011). In the insurance sector, brands invest in advertising and reputation-building as trust signals (Erdem & Swait, 1998; Kirmani & Rao, 2000). However, social inflation disrupts this signaling process. Actions like withdrawing from high-risk markets or limiting coverage contradict the brand messages insurers have spent decades promoting. For consumers, this inconsistency leads to signal failure: the promise of stability is undermined by visible retreat, damaging trust and accelerating brand erosion.

Managerial and Strategic Implications

The brand trust erosion facing the insurance industry is not merely a PR issue but a strategic crisis amplified by social inflation. Consumers are increasingly sensitive to perceived corporate indifference, particularly when claim denials, premium spikes, or market exits contradict longstanding brand promises. For example, in 2023, nearly half of claims filed with the 13 largest home insurers were denied, up significantly from prior years (Finkelstein, 2024). Reports suggest that funds were often redirected toward shareholder returns rather than policyholder payouts (Phillips & Meyer, 2025). While isolated incidents of denied claims may have previously faded from public memory, large-scale exits from disaster-prone states like California and Florida made this trust gap systemic and highly visible (Feinman, 2025). Social inflation magnifies reputational risk as public skepticism, litigation, and media scrutiny escalate (Kindsiko, 2013). Insurers must therefore embrace transparency not as compliance, but as a proactive trust-building strategy.

Rebuilding Trust Through Transparency and Communication

Clear communication about difficult decisions, paired with humility and accountability, becomes critical. Lessons from Chipotle's E. coli recovery show that trust is restored through open acknowledgment of failures, corrective action, and transparency (Karimova, 2024). Similarly, insurers should recognize the gap between their market withdrawals and the reassuring promises embedded in slogans like "Like a good neighbor..." (Tong et al., 2022).

Transparency must go beyond generic PR. Evidence shows that concrete disclosures, such as claim settlement ratios, solvency metrics, and risk rationale, can directly improve public trust (Auger, 2014; Kim & Lee, 2018). Communication should avoid ambiguity, focusing on fact-based messaging consistently across channels.

Segmenting Stakeholders

Stakeholder segmentation is critical for restoring trust. Situational Crisis Communication Theory (Coombs, 2007) suggests that responses should be calibrated based on how much responsibility each group attributes to the insurer.

Policyholders: Trust erosion is most severe in disaster-prone states where coverage withdrawal contradicts core brand promises (Milman, 2025). Communications in these markets should focus on transparency, accountability, and rebuilding trust. For lower-risk regions, messaging should emphasize stability and reassurance (Chaudhuri & Holbrook, 2001; Erdem & Swait, 2004).

Regulators and Policymakers: Regulators face the challenge of balancing market solvency with homeowner access to affordable coverage (NAIC, 2024). Climate volatility amplifies this tension (Karbon, 2025). Research suggests that failure to allow risk-based pricing may lead insurers to exit entirely, shifting the burden to public systems (Kunreuther, 2018). To foster collaborative solutions, such as reinsurance pools, mitigation incentives, or parametric insurance, insurers should frame their challenges as systemic (Kunreuther & Michel-Kerjan, 2009), offering full transparency into actuarial data and risk justifications.

Media and Public Watchdogs: These entities play a catalytic role in amplifying social inflation through narratives about denied claims, rate hikes, and market exits (PR Newswire, 2024; Jacobson & Brownlee, 2005). Their reports often shape public sentiment faster than actuarial facts (Eccles & Vollbracht, 2006). Insurers must counter negative framing by offering transparent data, human-centered success stories, and third-party validation (Kim & Lee, 2018; Coombs, 2007). Openness, rather than defensiveness, becomes essential for reputation management.

Strategic Takeaway

Rebuilding brand trust in the post-social inflation era demands proactive, segmented strategies that align operational decisions with public narratives. This means transparency for regulators, trust-rebuilding for high-risk policyholders, and narrative clarity for media stakeholders. The common thread across all groups is consistency between brand promises and real-world actions.

Future Directions and Research Agenda

Despite widespread discourse on terms like greedflation and shrinkflation, social inflation remains underexplored in marketing literature, particularly in relation to brand trust and consumer perception. Existing analyses tend to frame social inflation as a legal or financial issue, often ignoring how it directly affects brand narratives and stakeholder trust in sectors like home insurance. This summary brief calls for a more interdisciplinary research agenda that views social inflation not merely as a financial burden but as a marketing and reputational challenge. Key directions for future research include:

Brand Trust Erosion and Recovery: Longitudinal studies tracking how trust erodes when insurer actions (e.g., market exits) contradict brand promises like “Like a good neighbor...”, and whether that trust can be restored over time.

Signal Interpretation Under Crisis: Research on how consumers interpret conflicting signals, e.g., protective brand messaging versus restrictive claims practices, especially during heightened risk periods.

Stakeholder-Specific Trust Models: Studies should examine how trust recovery mechanisms differ across stakeholder groups (e.g., high-risk vs. low-risk policyholders, regulators, media) and test what types of interventions (e.g., public apologies, data transparency) are most effective.

Media Framing and Public Sentiment: Investigate how media narratives about insurer exits or denied claims amplify social inflation effects, influence juror behavior, or affect consumer retention.

Efficacy of Transparency Strategies: Empirical testing of transparency initiatives, such as releasing claims denial data or collaborating with independent validators, to determine their impact on trust and policyholder retention.

Geographic and Socioeconomic Dynamics: Explore how trust perceptions differ between disaster-prone regions and lower-risk areas, particularly in marginalized communities with heightened financial vulnerability.

Interdisciplinary Collaboration: Future research should bridge marketing, public policy, law, and climate science to develop solutions that balance financial solvency with consumer trust and societal resilience.

Conclusion

The erosion of brand trust in the U.S. homeowners' insurance industry is more than a financial or operational issue, it reflects a growing misalignment between brand promises and corporate actions. Social inflation, compounded by environmental volatility, litigation trends, and regulatory constraints, has exposed the limits of legacy branding in this sector.

This summary brief illustrates how the disconnect between slogans like “You’re in good hands” and actions like mass market exits fuels reputational dissonance and accelerates consumer distrust. Through the lenses of institutional theory, perceived risk theory, and signaling theory, the brief explains how insurers’ decisions, though rational from a financial or risk perspective, can undermine long-standing consumer relationships when those decisions contradict public-facing brand narratives.

Repairing this trust requires more than reactive PR; it demands strategic transparency, stakeholder-specific communication, and alignment between brand positioning and operational reality. Encouragingly, recent signs of market stabilization, such as Florida’s admission of new insurers and California’s pending reform package, suggest that trust recovery is possible, but only through deliberate effort.

For marketing professionals, the lesson is clear: brand equity in the post-social inflation era is built not just through creative campaigns, but through consistency between promise and performance. For policymakers, it underscores the urgency of fostering public-private collaborations to stabilize high-risk markets. And for

researchers, it highlights a critical opportunity to study how institutional trust can be repaired in the face of systemic uncertainty.

References

References are available upon request

Full Paper

Marketing the Value of International Enrollments: Do U.S. Universities Need Better Public Engagement Strategies

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This paper explores the evolving landscape of international student enrollment at U.S. institutions of higher education. Following a notable surge in enrollment between 2023 and 2024, emerging trends suggest a potential decline in the current and upcoming academic years, influenced by shifting public sentiment and policy discourse. These changes have posed challenges not only for international students but also for higher education institutions. The paper provides a comprehensive analysis, beginning with a historical overview and the motivations behind education-related migration. It then examines recent developments, public and policymaker concerns, and institutional marketing efforts aimed at attracting international students. Finally, it proposes strategic responses to counter prevailing perceptions and concludes with recommendations for future research and dialogue.

Introduction

This has been a year of discussions about global trade and its implications. BCG and Bloomberg Media Studios analyzed topics CEOs and analysts are concerned about. Their results, based on about 300 topics across 4,864 earning calls worldwide in Q1 of 2025 indicated that CEO mentions of trade Wars increased 950 percent worldwide (Bloomberg, 2025). “Tariffs, supply chain shifts, tax policies and operational risk management all make the top 10 trending list” (Bloomberg, 2025). The overall deficit of \$918.4 billion represents about 3.1 percent of the GDP with the greatest imbalance of imports-exports with China in 2024. Politicians and policy makers in Washington have justified discussions on the trade deficit - and resultant tariffs – using a mix of sound and questionable arguments. Some economists have warned about the overall trade deficit and international debt reaching unsustainable levels (Bernstein & Baker, 2016; Ferry, 2024; Gagnon, 2017). While others have argued against the simplistic win (trade surplus) versus lose (trade deficit) proposition since deficits can result in a stronger U.S. economy, increase global growth, lower inflation, etc. (Froman, 2025; Mankiw, 2016; Organisation for Economic Co-operation and Development, 2025).

While goods imports versus exports of goods leading to a trade deficit have dominated the discussions given their overall significance, the story in the services sector is a vastly different one. United States, being increasingly service oriented, has maintained a surplus of service exports to imports for decades (CFR.org, 2025). The service sector has long dominated the U.S. job market accounting for 84 percent of the total while manufacturing employment was less than 10 percent of the overall job market (Isidore, 2025). One of the focal points in the trade war has been the automotive industry in which about 1.3 million workers are employed by the car dealers while only 1 million works in the automotive plants and parts plants in the U.S. But as tariffs of cars take hold reducing the supply of cars, service jobs at the dealerships are expected to weaken (Isidore, 2025).

Many service sectors are affected by the policies enacted by the federal government during 2025. One such sector relates to tourist visitations to the United States. international tourism to the United States is expected to decline by 9.4 percent (Tourism Economics, 2025). Visitation from Canada dropped by 20.2 percent during 2025. Tourism Economics (2025) predicts that spending by tourists is expected to decline by about \$9.0 billion. Another industry that is expected to feel negative impact is the Hollywood film industry where 100 percent tariffs on films produced outside the U.S. is proposed. Suffice to say that when one looks at the services sector including tourism, financial services, IT, health care, etc. the surplus is at about \$293.3 billion during 2024 according to the Bureau of Economic Analysis (Tyson, 2025)

Among the service sectors significant to this paper is the inflow of international students to pursue higher education in the United States. The education sector is an important component of service and produces a surplus each year. According to the Institute of International Education, there are 1.12 million international students at U.S. higher education institutions during the 2023-2024 academic year (FWD, 2025; Institute of International Education,

2024). This makes up about 7.7 percent of students on all college campuses nationwide. Tuition, boarding, and other fees these students pay add to the service surplus and thus reduces the overall deficits often cited.

At this point, there seems to be heightened anxiety among international students about the current situation. Social media posts about students being detained or removed by agents have created a sense of unease (Drenon & Levinson-King, 2025). Media reports indicate that over 1,000 international students or graduates had their visa revoked or legal status changed according to Insider Higher Ed publication quoted by BBC (Drenon & Levinson-King, 2025). According to government officials, many of these cases relate to pro-Palestinian protest on university grounds. Beyond actions against students, there are several instances of trying to curtail university funding as is the case with Columbia and Harvard universities.

Economically, the idea that international students taking classes in American universities is similar to Chinese companies buying American agricultural products. Foreign monies flow into the American economy and the “product” that leave the country is knowledge that these students take away when they return to their countries of origin after graduation.

International students have long stood as both symbols and agents of America’s global educational leadership. Their presence enriches U.S. campuses, drives institutional revenue, supports scientific and technological advancement, and contributes significantly to the economy. As the data clearly show, they are not only consumers of education but also contributors—to the classroom, to the local and national economy, and, in many cases, to American innovation and soft power diplomacy. Yet, despite this, the current political, cultural, and legislative climate paints an increasingly precarious picture for international students in the U.S.

Historical Overview

Beginning with foreign students travelling to foreign regions of Europe such as Greece, to learn in pre-modern times to the influx of students into the U.S. today. The presence of international students in U.S. universities dates back to the late 19th and early 20th centuries, with early arrivals primarily from China and Japan. In a 2007 book on the matter by Bevis and Lucas, factors such as immigration policy, global competition and political movements in foreign countries facilitated the rise of international students in the U.S. (LeBeau, 2012). At the macro level, World Wars I and II, the Great Depression, and Cold War resulted in the development of international student and scholar exchanges. The Chinese Exclusion Act of 14882 and the McCarran-Walter Act of 1952 impacted student migration negatively. But in the 1950s, immigration regulation eased, and academic institutions vastly expanded international student enrollments (LeBeau, 2012).

Community colleges were able to attract international students during the 1980s and by end of the 20th century they attracted in increasing percentage of foreign students. Witnessing a greater number of international students coming to the U.S., other English-speaking countries began the push to attract them. Increasing U.S. student visa restrictions and the aftermath of the attacks of 9/11 led a decline in international enrollments in the U.S. Programs like the Boxer Indemnity Scholarship facilitated these educational exchanges, aiming to foster mutual understanding and development. Over the decades, the U.S. solidified its reputation as a premier destination for higher education, attracting students worldwide due to its advanced academic programs and research opportunities.

During 2023-2024, the latest numbers available suggest that there are 1.12 million international students enrolled in American institutions (FWD, 2025; Institute of International Education, 2024). This number represents 7.7 percent of the total student population. International students come from about 200 countries with more than half from China and India.

Causes for Educational Migration

Demand for American degree programs depends on a few factors. They are, in no particular order, the number of students who are post-secondary ready; home countries’ university options; availability of financing options at home and abroad; ability to engage in cutting edge research in STEM fields, appeal of the American job market and related salaries in specific fields; home country governments’ need to establish improved diplomatic relations with the U.S. and thereby attract investments & improve the economy; and many others. In some cases, home country governments (ex. China and India) have initiated establishment of elite educational institutions and yet many of their students are unable to enroll due to intense competition amongst a vast majority of highly talented

students applying for the few seats. In the short-term, the home country's higher education supply is limited, forcing many to look abroad.

During the past 20-30 years, the economic climate in two of the most populous countries, China and India, have also improved substantially resulting in a higher household incomes and ability to finance education abroad. It is estimated that the number of Chinese families with incomes greater than the average charged by American public institutions for tuition, board, and dorm grew from 0.005 percent in 2000 to more than 2 percent in 2013 (Bound et al., 2020). To some extent, demand for U.S. enrollments, especially for graduate programs, tend to increase as U.S. employment rates are low especially among Indian students. But since 2016, there have been a drop in Indian students taking the GRE exam even with lower unemployment rates in the U.S. The GRE (Graduate Record Examination) is generally seen as the measure of foreign students' willingness to come to the U.S. for graduate education. In a Washington Post article, a potential explanation for this phenomenon was the perception that United States was less welcoming to international students (Anderson & Svrluga, 2019).

Enrollment Trends and Recent developments

The traditional causes of globalization of education were lack of educational opportunities in home countries in certain fields, positive perception of U.S. institutions, better job opportunities and pay in the U.S., etc. (Bound et al., 2021). Unlike work-related visas, student visas were not restricted by a quota. Initially, most of the educational opportunities were sought in the bachelor's degree category. Graduate degree seekers began arriving in larger numbers in the post 2000s. Although the United States receives the largest share of foreign students, other English-speaking countries such as U.K., Canada and Australia began seeing an increase in international student enrollments. According to some sources eight countries (USA, UK, Australia, Germany, France, Russia, Canada, and Japan) account for close to 60 percent of international student enrollment with USA, UK, and Australia accounting for about 35 percent of all student inflows (UNESCO Institute for Statistics, 2018).

The number of international students in the United States had nearly doubled over the past two decades and has benefited U.S. institutions. Cuts in education spending at the state and local level are sometimes made up by tuition charged to foreign students (Duwaji, 2024). International student enrollments plunged during the Pandemic with fall 2020 enrollments being 16 percent lower than the same time during the previous year but have been rebounding since (Batalova, 2021). As of the 2023–2024 academic year, the United States hosted over 1.1 million international students, marking a 7.7 percent increase from the previous year (FWD, 2025; Institute of International Education, 2024). Notably, India surpassed China as the leading country of origin, with 331,602 Indian students enrolled—a 23 percent rise. Conversely, Chinese student enrollment declined by 4.2 percent, reflecting geopolitical tensions and policy changes.

Despite growth during 2023-2024, recent data indicates a concerning trend. SEVIS (Student and Exchange Visitor Information System) data managed by the Department of Homeland Security showed that between March 2024 and March 2025, international student enrollment declined by 11.33 percent with significant drops in doctoral programs and among students from countries like Bangladesh, Iran, and Nigeria (Glass, 2025). Breaking down the numbers reveal that during this period there was a 4.5 percent decrease in international doctoral program enrollments; 28 percent decline in Indian students overall including a 4.2 percent decline in Indian student enrollment in doctoral program (Andrews, 2025).

In March 2025, international student visas were being revoked for their involvement in political protest and later the SEVIS (Student Exchange Visitor Information System) records of about 4,700 students were being deleted. When students' visas are revoked, they are unable to leave or re-enter the U.S. When their SEVIS record is deleted, they cannot attend college or maintain legal work authorization ((Raymond & Raymond, 2025). In some cases, the institutions that maintain SEVIS records are not notified of the deletions causing confusion (FWD, 2025). As of April 24, 2025, over 1,800 students from about 280 colleges and universities had their legal status changed by the State Department (Bebernes, 2025).

As a result of lawsuits, the federal government has reversed some actions and the students' status has been restored. Many impacted students had already left the U.S. due to these actions, and it is unclear how it will affect their future prospects to enter the country. There have also been efforts to implement a one-strike immigration policy that is likely to affect international students and all temporary visa holders (U.S. State Dept, 2025). Citing national security concerns, a legislation to prevent Chinese students from studying in the U.S. has been moving through the Congress (Ting, 2025)

At the center of this disruption is the very public wrangling between Harvard University and Washington. While there are many dimensions to this dyadic exchange between the two, the University might potentially lose close to 7,000 international students. Given this uncertain environment, many colleges are pausing their international graduate and undergraduate admissions (Knox, 2025). Others view this as a risk management situation. University of Illinois – Urbana Champaign bought a 3-year insurance policy for up to \$60 million in coverage from Lloyds of London. This policy that cost \$484,000 per year will pay if a visa bans on Chinese students take effect (Larmer, 2019).

Messaging international students on the changing political climate has varied. Institutions such as Northeastern University in Boston developed webpages to keep the students abreast of Washington policy directives. Brown University, for instance, advises current and prospective international students to postpone travel after a professor was deported for her views. Columbia University’s Schools of Journalism has warned international students about their vulnerability to arrest or deportation. Some schools such as Bunker Hill Community College in Boston have suspended their study abroad programs citing potential travel restrictions (Associated Press, 2025).

Pre-COVID decline in student arrivals were due to earlier travel bans, stringent visa policies, heightened scrutiny, and a perceived unwelcoming environment. According to sources, the 2017 travel ban caused a 7.7 percent decline in international student arrivals (Knox, 2025). In a couple of years from that there was another decline due to COVID-19. A 2021 survey found that about 75 percent of prospective advanced STEM students hoped to remain and work in the U.S. after completing their education while a similar survey in 2024 fewer students preferred to stay in the U.S after graduation (Fwd.us, 2025). In 2025 there is a new travel ban and that is likely to affect international admissions as well (Treisman, 2025). Initially, there were ban on citizens from 12 countries and could expand to a total of 48 countries (Pamuk & Pamuk, 2025).

Although universities have used marketing effectively to attract international students, they do not seem to have effectively made the case to the policy makers and the public about the value of international enrollments. In the current political situation, international students in the country are often sees as unwanted immigrants. The political discussion seems to conflate international student enrollments with overall immigration sentiments. There is a need to clearly separate the two groups since the latter were provided with student visas to legally be present in the country for educational reasons.

Concerns with International Student Enrollments

While international students contribute significantly to the U.S. economy and enrich campus diversity, concerns about national security, job market competition, and cultural integration cannot be ignored. Addressing these challenges requires a balanced approach — safeguarding national interests and economic fairness while fostering inclusivity and cross-cultural understanding. George Borjas, a Harvard economist questioned the rationale for supporting large-scale enrollment of foreign students and argued that there is little support to the claim that foreign students employed by research labs and classrooms have quickened the pace of scientific discoveries. He also showed that U.S. taxpayers subsidized international students’ education. Some of these arguments are also being made in the context of the current debate on the subject. The following details few of the arguments against international student enrollments.

National Security: One of the most prominent concerns centers on the potential for international students to pose risks to national security, especially those from countries viewed as strategic competitors, such as China and Russia. U.S. intelligence agencies have raised alarms about the potential theft of intellectual property and the misuse of research collaborations, particularly in STEM fields. Notable examples include the following:

- The Federal Bureau of Investigation (FBI) has warned universities about the possibility of foreign influence and espionage via research programs (Wadhwa, 2020).
- In 2020, the U.S. government introduced tighter visa restrictions and surveillance for students from certain countries, citing espionage concerns (U.S. Department of Homeland Security, 2020).
- The China Initiative, launched by the Department of Justice in 2018 and later suspended due to criticism, focused on preventing unauthorized technology transfer but disproportionately targeted Chinese scholars and students (Department of Justice, 2022).

These measures, while framed as security precautions, have led to perceptions of racial profiling and may deter international students from applying to U.S. institutions. Some policymakers express concerns about espionage, particularly involving students from countries like China. Policies have been enacted to revoke visas and increase surveillance, citing national security threats.

Job Competition: Another concern is that international students may compete with domestic students for internships, jobs, and research positions, particularly in high-demand areas such as engineering, computer science, and business. Critics argue that programs like Optional Practical Training (OPT) and Curricular Practical Training (CPT) give international students a competitive edge by allowing them to gain U.S. work experience without the same visa constraints faced by domestic graduates (Ruiz & Budiman, 2023). Studies show that employers may prefer OPT students due to their flexibility and lower costs compared to hiring through traditional visa sponsorship (Lowell & Avato, 2014).

However, research also suggests that international students often fill labor gaps in specialized fields and contribute positively to innovation and entrepreneurship (Bound et al., 2021).

Cultural Integration: Critics argue that large international student populations may hinder cultural assimilation and strain campus resources. Despite the diversity that international students bring, there are growing concerns that they often remain socially and culturally isolated on college campuses. Many international students report challenges in making friends with American peers, understanding cultural norms, and participating in campus life (Glass & Westmont, 2014). Some campus communities report a perception that international students "cluster" by nationality, limiting cross-cultural interaction and undermining broader integration goals (Zhou et al., 2008).

Faculty and staff may also be ill-prepared to support the unique academic and social needs of international students, exacerbating feelings of marginalization. This could lead to mental health and wellness issues among them. International students experience significantly higher levels of loneliness, anxiety, depression, and stress—often due to cultural adjustment challenges, language barriers, and separation from family (Ammigan & Jones, 2018). Qualitative studies highlight persistent themes of anticipatory anxiety, financial pressure, social isolation, and academic stress (Wen et al., 2017). Improving cultural integration requires intentional institutional efforts, such as intercultural programming, peer mentoring, and inclusive pedagogy (Orleans, 1988).

Many international students also face financial precarity—unable to access local scholarships or government loans and sometimes pushed into precarious labor due to visa restrictions. In extreme cases (notably in Canada), students have been subject to exploitative recruitment, unsafe housing practices, and even human trafficking under deceptive recruitment schemes (Berrada, 2024).

Strain on Housing and Campus Resources: Rapid growth in international enrollments has outpaced housing availability, especially in Canada and the U.S. This has led to overcrowding, inflated rents, and pressure on local infrastructure (Berrada, 2024). Institutions are scrambling to build or repurpose student housing to keep pace—efforts often lag behind actual demand.

Enrollment Declines: Implications for Universities:

While there are concerns at the macro level with respect to rising international student enrollments, declines in enrollments pose several challenges. This short section will highlight a few of them.

- a. **Financial Strain:** Reduced tuition revenue can impact university budgets, potentially leading to program cuts and decreased financial aid for domestic students.
- b. **Diminished Global Standing:** A decrease in international students may affect the global reputation of U.S. institutions, making them less attractive to top-tier faculty and researchers.
- c. **Reduced Diversity:** The loss of cultural and intellectual diversity can limit the breadth of perspectives and experiences available to all students.

Marketing to International Students:

In order to provide some perspective, this short section highlights how American institutions appeal to international students. Suffice to say that their marketing efforts have been highly successful in the past decades. International student enrollments and university ranking are mutually reinforcing (Interstride, 2025). Higher ranked universities attract academically excellent students from around the world resulting in the schools' academic credentials. As schools get better in enhancing their standings competition to enroll international students tends to

increase. As a result, institutions tend to intensify their marketing efforts to draw more and better students by offering better value and showcasing better return on their educational dollars.

American universities, like their counterparts in other countries, employ a variety of marketing and recruiting techniques to attract foreign students. The traditional strategies included advertising in home country media and taking part in university fairs at swanky hotels abroad to get facetime with potential students, parents, counselors, alums, etc. These meetings, often based on appointments, tend to be professional and often customized to the needs of the students/parents. Bigger universities tend to hold their own meet and greet events as opposed to joining forces with other schools for common enrollment fairs. Most of the programs advertised tend to be undergraduate and graduate programs since the traditional Ph.D. programs provide tuition waivers, stipends, or assistantships. With the advent of the Internet and social media, many schools have taken to various platforms to reach potential students. These tools have been used to attract American high schoolers and so targeting international students is seen as a lower cost option compared to visiting countries and hosting the meetings.

Strategies for Marketing & Public Engagement

Universities in the U.S. have been marketing to students around the world for decades and all indications are that these institutions of higher learning have been very successful in recruiting international students. But they have been less effective in educating the public and policy makers on the value of enrolling international students and how they contribute to the larger economy. Today, more than ever, there is a need for American universities to sound off positively on the value of having and nurturing international students. American history is filled with stories of individuals that came to study in the institutes of higher learning and eventually make the country stronger in scientific, technological, and cultural fields (Fwd.us, 2025).

“Many people would say that the reason Apple became such a valuable company is because of Steve Jobs’ obsession with two things: product and marketing (Ezzine, 2022). Similarly, universities and colleges established reputations because of the great product (graduates) output and what those graduates have been able to do in their careers. Many in the university community and elsewhere think that great products don’t need marketing (Ezzine, 2022). But that thinking might need to change given the changing public and political perception of higher education in the last decade or so. While there might be legitimate reasons for such pessimistic view, the following themes that have emerged in these arguments: rising costs and student debt (Bronzini-Vender, 2025); mismatch between degree education and job market skills required (Salas-Velasco, 2021); political-ideological bias and free-speech impediments (Behrent, 2019; FIRE, 2024); availability of varied career pathways (Facet, 2023; Lake, 2025); administrative bureaucracy (Jones, 2023), and the general concern that post-secondary education is not relevant (MacFadden, 2023). A study published recently reveals that higher education marketing budgets are about 1.06 percent of institutional revenue (Scarborough, 2024). But the study was about marketing to prospective students and parents.

In addition to existing challenges, in recent months, many institutions of higher education have also been confronted with the additional imperative of demonstrating the value of their curricula to international students. Over the past two decades, colleges and universities across the country have strategically invested in recruiting international students. Their efforts have paid dividends—economically and academically—but institutions have not matched that external recruitment with equally strong internal advocacy directed toward American voters, local communities, and especially policymakers. Unfortunately, there was not enough data on whether universities spend marketing dollars to engage with the public or policy makers about the value of their international graduates. As a result, international students are often caught in the crossfire of domestic immigration debates, national security concerns, and cultural anxieties. The complexity of these issues demands more than a transactional or reactive response. It requires a sustained, values-based campaign to educate the public on the real-world benefits of international enrollments—not just to universities, but to society at large.

In this evolving landscape, universities and colleges have two distinct segments to address – international students on one end and the public and policy makers on the other. The need for sensitivity to different points of view cannot be overemphasized. To address skepticism amongst the public and policy makers, one fundamentally needs to highlight the value of international student enrollment and its contribution to the economy. While some of these benefits have been addressed earlier in this paper, it bears highlighting again.

Benefits of International Students Enrollments:

For decades, the U.S. has been the top destination for international students, and it has provided overall benefits to the country (FWD, 2025). American university and college system has always been thought of as best in the world. With about 5 percent of the world population, American institutions of higher learning have been a beacon of opportunity for international aspirations. In this current debate, much has been written about the impact of international enrollments for the institutes of higher learning and the American economy at large. In this section of the paper, we will explore the positive contributions made as a result of international enrollments.

Contributions to Institutions: Foreign students pay significantly more tuition and fees than the local students. They are also less likely to rely on financial aid or scholarships. Roughly 80 percent of undergraduate international students cover their cost of attending (Open, 2023). When you consider all international students about 60 percent are paying for their American education (Duwaji, 2024). This allows the institutions to help local students. California and New York states have had the highest numbers of international student enrollments, and both realized \$6 billion in economic impact and over 50,000 jobs being supported by them (Bebernes, 2025).

According to a BEA report foreign students spend over \$50 billion while in the U.S. This includes tuition, fees, room/board and miscellaneous purchases (Bureau of Economic Analysis, 2025). Most of these are attributable to undergraduate and graduate students, with the exception of doctoral students. Even though public universities charge less, private institutions often engage in discounting their fees as a form of incentives (Bound et al., 2021). Full-tuition payments by international students are crucial to institutions as they face declines in both federal and state appropriations. Many master's level programs exist because of the enrollment of full fee-paying international students (Shih, 2017). Many research institutions earn as much as 20 percent of their tuition revenue from foreign students (Larmer, 2019).

In some cases, universities invest in programs preferred by international students and the revenues from these programs help develop programs that are catered toward local students (Bound et al., 2020). A study in 2015 found that international students contributed \$9 billion to public universities which was about 28 percent of their total revenue (Loudenback, 2016). This dependence on international students presents challenges since the inflow of international students are dependent on home country economic situation, growth in incomes in those countries, competition from institutions in other countries, etc. (Rash, 2025).

While financial contributions tend to be top-of-mind in these discussions, international students contribute to cultural vitality and diversity on college campuses. Their presence tends to expose American students to foreign cultures and foster global connections. For instance, universities that have a critical mass of international students typically see international cultural programming – be it a general international student festivals or specific country-related festivals that have cultural displays, food and entertainment programs from various nations.

Contributions to the U.S. Economy: There are several misconceptions about international students. One is that their economic contribution to the American economy is rather small. But research shows that in 2019, over a million international students were enrolled in U.S. universities creating 458,000 jobs and thus contributed about \$44 billion to the American economy (Chun & Choi, 2020). Another misconception is that they stay in the U.S. after graduation. Although the number of OPT approvals can increase consistently, it is less than 20 percent of the total number of international students graduating. A third related misconception is that those who stay back take jobs away from American citizens. Research shows that the economy responds to influx of immigrants by increasing the demand for labor and that actual impact is relatively small (Chun & Choi, 2020). The final misconception is that the U.S. will all remain as the top destination for international students seeking degrees. Although the U.S. has been the number one destination for a while, there were declines since 2017 while Canada, UK, and Australia have increased their intake (Open, 2023).

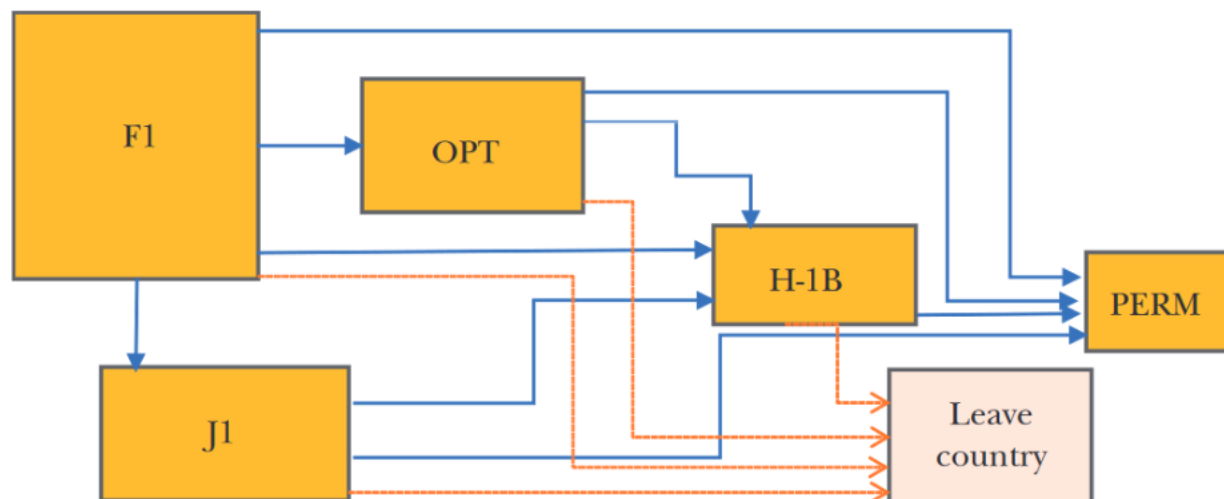
International students contributed approximately \$50 billion to the U.S. economy in 2023, supporting nearly 400,000 jobs. Their tuition and living expenses bolster local economies and subsidize educational costs for domestic students. According to data released by the National Association of Foreign Student Advisors (NAFSA), 1.1 million international students at U.S. universities and colleges contributed about \$43.8 to the national economy and supported more than 378,000 jobs during 2023-2024. At the same time, they pay nearly \$500 billion in federal, state, and local taxes (American Immigration Council, 2024).

The economic benefits are more pronounced at the local level. For instance, the Greater Boston area has about 50 or more colleges with over 63,000 international students attending with economic gains up to \$3 billion (Sherman, 2025). While the Ivy Leagues and other prestigious schools tend to draw more attention, the state universities and colleges attract the largest number of international students. At just three top public universities — Arizona State, the University of Illinois Urbana-Champaign, and UC Berkeley — international students generated nearly \$1.7 billion in economic impact and supported over 16,800 jobs. Expanding the view to the top 10 public institutions, including four campuses in the University of California system, that impact rises to \$4.68 billion and 47,136 jobs (Sherman, 2025).

Beyond their expenditures as students, many students move through the immigration process starting with the OPT (Optional Practical Training) that provides American companies a ready supply of trained labor. OPT seems to be a factor in drawing international students to the U.S. OPT is available for up to 2 or 3 years, after which many apply for the highly numerically restricted H-1B program. For instance, students with graduate degrees can apply for 20,000 slots in the program. In 2023, about 160,000 students participated in the OPT program, representing a 37 percent increase from 2022. A majority of them, about 122,000 were in the STEM pathways with India and China being the top two countries of origin (Boundless, 2024). The OPT program allows employers to “test drive” the hires for one or two years before committing to hiring the candidate and going through the immigration process. Having a pool of talented global scholars with training allows American companies in certain sectors (IT, Business, and others) to draw from it and recruit the best fit.

The following is a diagram that traces the path for F-1 students after they graduate from their degree programs

Figure 1: Typical Pathway for F-1 Visa Student Holders



Source: Bound, Braga, Khanna, & Turner, *Journal of Economic Perspectives*, Vol 35, No. 1, Winter 2021, pp 163-184.

There have been studies that indicate foreign H-1B candidates’ willingness to accept lower wages might depress the market negatively affecting American born job seekers (Bound et al., 2021). Similarly, a study indicated that the concentration of international students at the undergraduate level in fields like STEM, economics, business, etc. might lead local students to focus on other less competitive areas (Anelli et al., 2017).

Contributions to Academic and Research Excellence: Many of the international students pursue STEM fields, enhancing research output and innovation. They also bring diverse perspectives, enriching classroom discussions, and fostering global awareness among domestic students. Studies have suggested the role of international students in higher level pursuits such as membership in National Academy of Sciences, Nobel Prize winnings, publication of articles in elite level journals (Stuen et al., 2012). Similar achievements by international scholars have been witnessed in tech entrepreneur fields. The co-founder of YouTube (Jawed Karim), co-founder of Google (Sergey Brin), co-founder of NVIDIA (Jensen Huang), CEO of Microsoft (Satya Nadella), former CTO of Cisco Systems/Motorola and current CEO of NIO (Padmasree Warrior), etc. are a few examples to showcase the notion.

The founders of Zoom and Grammarly were once international students in our institutions (FWD, 2025). Similarly, cancer research to neurosurgery have been impacted by the contributions to international scholars in the U.S.

On the flip side of this ‘brain-gain’ of international scholars contributing to excellence in the U.S. is the ‘brain-drain’ experienced by their home countries. Yet, their successes could inspire home country entrepreneurs to excel. A case in point is the evolution of Perplexity AI, co-founded in India by Aravind Srinivas who is also its CEO after completing his undergraduate and graduate studies in India and his doctorate in computer science in UC Berkely. Perplexity has become a notable player in the AI-driven search ecosystem (Britannica, 2025).

Contributions to Spreading Democracy and Building Strong Relationships: In the past many politicians and policy makers viewed the presence of international students at U.S. universities to spread the message of democracy and build strong relationships with their home countries (Bebernes, 2025). This would eventually project positive image of the United States around the world. President John F. Kennedy, Jr. told a group of foreign students visiting the White House in 1962, about some of them returning the U.S. as presidents or prime ministers of their own countries. Many consider American global education platforms to extend soft power and exerting U.S. influence on other nations. According to a study of 195 countries, as of October 2024, 70 world leaders from 58 countries had been educated in the U.S. (Hillman, 2024). The countries that followed the U.S. in this regard were U.K. and France.

Discussion and Conclusion

International students are vital to the success and sustainability of U.S. higher education. While challenges exist, particularly regarding public perception and policy, proactive strategies can help universities convey the value of international enrollment. By fostering understanding and highlighting mutual benefits, institutions can work toward a more inclusive and globally engaged educational environment. To reiterate from the previous section, U.S. institutions need to project the value of international students by emphasizing some of these benefits accrued.

- **Highlight Economic Impact:** Share data on how international students contribute to local economies, support jobs, and subsidize education costs for domestic students.
- **Promote Success Stories:** Showcase achievements of international alumni who have made significant contributions to American society, emphasizing their roles in innovation, entrepreneurship, and community development.
- **Foster Community Engagement:** Encourage programs that integrate international students into local communities, promoting cultural exchange and mutual understanding.
- **Enhance Transparency:** Clearly communicate the vetting processes for international students, addressing security concerns and emphasizing the rigorous standards in place.

From a policy standpoint, blanket travel bans, retroactive visa revocations, and rhetoric that conflates international students with illegal immigration are short-sighted and risk undermining America’s long-held academic dominance. If universities lose the trust of international applicants—or if the U.S. becomes perceived as hostile or unreliable—competitor nations like Canada, the U.K., and Australia are well-positioned to benefit. These countries are investing in welcoming infrastructure and immigration pathways that not only attract international students but retain them for the long term. The U.S., on the other hand, risks hemorrhaging the global talent that once naturally flowed toward its campuses.

The impact of declining enrollments is not merely statistical; it is deeply human. International students invest heavily—financially, emotionally, and personally—in coming to the U.S. They navigate a complex system with hope, determination, and often vulnerability. Abrupt policy changes, detention, surveillance, and unclear messaging send a damaging signal that this investment may not be safe or worthwhile. This perception shift does not just hurt the students; it harms the institutions they would have attended, the faculty who would have mentored them, and the peers who would have learned alongside them.

In this moment of reckoning, American universities must reimagine their roles as not just centers of learning, but also as public advocates for the educational and economic value that international students bring. If international students truly contribute to enhancing the image and reputation of universities and colleges, they are owed better defense amid the current “aggressive targeting of international students” by the policy makers (Sapochnik, 2025). This includes building coalitions with industry, creating channels for direct dialogue with

policymakers, and crafting narratives that resonate with the American public—emphasizing jobs created, innovations launched, and international goodwill built through the presence of these students.

It also means confronting the very real concerns about integration, fairness, and resource competition with transparency and empathy. Cultural integration programs must be strengthened, and support services for international students must be made more robust. At the same time, policymakers must separate legitimate national security concerns from generalized suspicion and take a measured, evidence-based approach to student visa policies. To treat international students as expendable or as temporary “guests” is to misunderstand their long-term value. As mentioned earlier in the paper, many become future collaborators, employers, innovators, and ambassadors for American ideals abroad. A policy climate that alienates them does not just undercut higher education—it undercuts the nation’s influence, economy, and values.

In conclusion, defending and expanding international student enrollment is not just about numbers. It’s about reaffirming what American higher education stands for: openness, excellence, diversity, and opportunity. If these institutions are to remain global leaders, they must lead not only in recruiting talent—but in protecting it, advocating for it, and championing its role in shaping a more connected and prosperous future.

References:

- American Immigration Council. (2024). U.S. Immigration Statistics. *American Immigration Council*.
<https://map.americanimmigrationcouncil.org/locations/national/>
- Ammigan, R., & Jones, E. (2018). Improving the Student Experience: Learning From a Comparative Study of International Student Satisfaction. *Journal of Studies in International Education*, 22(4), 283–301.
<https://doi.org/10.1177/1028315318773137>
- Anderson, N., & Svrluga, S. (n.d.). *What’s the Trump effect on international enrollment? Report finds new foreign students are dwindling*.
- Andrews, G. (2025, April 11). *SEVIS Data Shows Declining Number of International Students in the United States* | Association of American Universities (AAU). Association of American Universities.
<https://www.aau.edu/newsroom/leading-research-universities-report/sevis-data-shows-declining-number-international>
- Anelli, M., Shih, K., & Williams, K. (2017). *Foreign Peer Effects and STEM Major Choice* (SSRN Scholarly Paper 2983684). Social Science Research Network. <https://doi.org/10.2139/ssrn.2983684>
- Associated Press. (2025, March 25). *International Students Weigh New Risks of Pursuing Higher Education in the US Under Trump*. US News & World Report. [//www.usnews.com/news/politics/articles/2025-03-25/international-students-weigh-new-risks-of-pursuing-higher-education-in-the-us-under-trump](https://www.usnews.com/news/politics/articles/2025-03-25/international-students-weigh-new-risks-of-pursuing-higher-education-in-the-us-under-trump)
- Batalova, J. B. E. I. and J. (2021, January 13). *International Students in the United States*. Migrationpolicy.Org.
<https://www.migrationpolicy.org/article/international-students-united-states>
- Bebernes. (2025, May 30). *As Trump takes aim at international students, these colleges have the most to lose*. Yahoo News. <https://www.yahoo.com/news/as-trump-takes-aim-at-international-students-these-colleges-have-the-most-to-lose-181233669.html>
- Behrent, M. (2019). *A Tale of Two Arguments about Free Speech on Campus* | AAUP.
<https://www.aaup.org/academe/issues/105-0/tale-two-arguments-about-free-speech-campus>
- Bernstein, J., & Baker, D. (2016, December 8). *Why Trade Deficits Matter—The Atlantic*. The Atlantic.
<https://www.theatlantic.com/business/archive/2016/12/trump-trade-deficit/509912/>
- Berrada, M. (2024, November 11). *The fragile state of student housing*. *University Affairs*.
<https://universityaffairs.ca/features/the-fragile-state-of-student-housing/>

- Bloomberg, M. S. (2025, May 30). *The CEO Radar Q2 2025*. Bloomberg. <https://sponsored.bloomberg.com/immersive-story/the-ceo-radar-q2-2025>
- Bound, J., Braga, B., Khanna, G., & Turner, S. (2020). A Passage to America: University Funding and International Students. *American Economic Journal: Economic Policy*, 12(1), 97–126. <https://doi.org/10.1257/pol.20170620>
- Bound, J., Braga, B., Khanna, G., & Turner, S. (2021). The globalization of postsecondary education: The role of international students in the US higher education system. *The Journal of Economic Perspectives : A Journal of the American Economic Association*, 35(1), 163–184. <https://doi.org/10.1257/jep.35.1.163>
- Boundless. (2024). International Students Studying in the United States: Trends and Impacts 2024. *Boundless*. <https://www.boundless.com/research/international-students-studying-in-the-united-states-trends-and-impacts/>
- Britannica, T. E. of E. (2025, May 14). *Britannica Money*. <https://www.britannica.com/money/Perplexity-AI>
- Bronzini-Vender, A. (2025, April 20). *Beyond the administrative bloat theory of everything*. Columbia Daily Spectator. https://www.columbiaspectator.com/opinion/2025/04/20/beyond-the-administrative-bloat-theory-of-everything/?utm_source=chatgpt.com
- Bureau of Economic Analysis. (2025, January). *BEA Interactive Data Application*. <https://apps.bea.gov/iTable/?reqid=62&step=6&isuri=1&tablelist=245&product=4>
- CFR.org. (2025, April 23). *The U.S. Trade Deficit: How Much Does It Matter? | Council on Foreign Relations*. <https://www.cfr.org/backgrounder/us-trade-deficit-how-much-does-it-matter>
- Chun, H., & Choi, J. H. (2020, August 11). Four Misconceptions About International Students in the U.S. *Higher Education Today*. <https://www.higheredtoday.org/2020/08/11/four-misconceptions-international-students-us/>
- Drenon, B., & Levinson-King, R. (2025, April 18). *Anxiety on US college campuses as foreign students deported*. BBC. <https://www.bbc.com/news/articles/c20xq5nd8jeo>
- Duwaji, B. O. (2024, March 28). *High fees paid by international students help US universities balance their books*. The World from PRX. <https://theworld.org/stories/2024/03/28/high-fees-paid-international-students-help-us-universities-balance-their-books>, <https://theworld.org/stories/2024/03/28/high-fees-paid-international-students-help-us-universities-balance-their-books>
- Ezzine, A. (2022, November 10). “Great Products Don’t Need Marketing”—Stefan Georgi. <https://www.stefanpaulgeorgi.com/blog/great-products-dont-need-marketing/>
- Facet. (2023, August 25). 5 alternatives to a traditional four-year college. *Facet*. <https://facet.com/career/5-alternatives-to-a-traditional-four-year-college/>
- Ferry, J. (2024, August 8). *How Budget Deficits Grow Due to Trade Deficits | Coalition For A Prosperous America*. <https://prosperousamerica.org/how-budget-deficits-grow-due-to-trade-deficits/>
- FIRE. (2024, September 5). *2025 College Free Speech Rankings expose threats to First Amendment rights on campus | The Foundation for Individual Rights and Expression*. <https://www.thefire.org/news/2025-college-free-speech-rankings-expose-threats-first-amendment-rights-campus>
- Froman, M. (2025, April 4). *Liberation and Its Discontents | Council on Foreign Relations*. <https://www.cfr.org/article/liberation-and-its-discontents>

- FWD, U. (2025, May 23). *International Students & Graduates in the U.S.: 5 Things to Know*. FWD.U.s. https://www.fwd.us/news/international-students/?utm_source=chatgpt.com
- Fwd.us. (2025, May 23). *Attacks on International Students Stifle Growth*. FWD.U.s. https://www.fwd.us/news/student-innovation/?utm_source=chatgpt.com
- Gagnon, J. E. (2017, March 29). *The Unsustainable Trajectory of US International Debt* | PIIE. <https://www.piie.com/blogs/realtime-economic-issues-watch/unsustainable-trajectory-us-international-debt>
- Glass, C. R. (2025, April 2). There's already 130,000 fewer international students in the US. Has anyone noticed? [Substack newsletter]. *Distributed Progress*. <https://distributedprogress.substack.com/p/theres-already-130000-fewer-international>
- Glass, C. R., & Westmont, C. M. (2014). Comparative effects of belongingness on the academic success and cross-cultural interactions of domestic and international students. *International Journal of Intercultural Relations*, 38, 106–119. <https://doi.org/10.1016/j.ijintrel.2013.04.004>
- Hillman, N. (2024, October 9). HEPI SOFT-POWER INDEX 2024: The US pulls further away, while the UK stands still and France slips back. *HEPI*. <https://www.hepi.ac.uk/2024/10/10/the-us-pulls-further-away-in-the-latest-soft-power-index-while-the-uk-stands-still-and-france-slips-back/>
- Institute of International Education. (2024, November 18). United States Hosts More Than 1.1 Million International Students at Higher Education Institutions, Reaching All-Time High. *IIE*. <https://www.iie.org/news/us-hosts-more-than-1-1-million-intl-students-at-higher-education-institutions-all-time-high/>
- Interstride. (2025, April 7). International student recruitment trends & challenges 2025. *Interstride*. <https://interstride.com/blog/international-student-recruitment-trends-challenges-2025/>
- Isidore, C. (2025, April 11). *This key American business sector has a massive trade surplus with the rest of the world. Its jobs are at risk in a trade war.* | CNN Business. CNN. <https://www.cnn.com/2025/04/11/business/service-sector-trade-war-jobs-threat>
- Jones, L. (2023, June 1). *One Culprit in Rising College Costs: Administrative Expenses*. US News & World Report. <https://www.usnews.com/education/articles/one-culprit-in-rising-college-costs>
- Knox, L. (2025, March 19). *International Enrollment's Precarious Moment*. Inside Higher Ed. <https://www.insidehighered.com/news/global/international-students-us/2025/03/19/colleges-fear-decline-international-student>
- Lake, S. (2025, June 13). "College doesn't carry the same ROI it once did": 70% of teens say their parents support them going to trade school or getting an apprenticeship | Fortune. https://fortune.com/2025/06/13/college-roi-trade-schools-apprenticeships-parent-support/?utm_source=chatgpt.com
- Larmer, B. (2019, January 3). One of America's Most Vital Exports, Education, Never Goes Abroad, but It Still Faces Threats. *The New York Times*. <https://www.nytimes.com/2019/01/03/magazine/one-of-americas-most-vital-exports-education-never-goes-abroad-but-it-still-faces-threats.html>
- LeBeau, L. G. (2012). International Students in American Colleges and Universities: A History. *Journal of International Students*, 2(1), Article 1. <https://doi.org/10.32674/jis.v2i1.544>
- Loudenback, T. (2016, September 16). *International students are now 'subsidizing' public American universities to the tune of \$9 billion a year*. Business Insider. <https://www.businessinsider.com/foreign-students-pay-up-to-three-times-as-much-for-tuition-at-us-public-colleges-2016-9>

- Lowell, B. L., & Avato, J. (2014). The Wages of Skilled Temporary Migrants: Effects of Visa Pathways and Job Portability. *International Migration*, 52(3), 85–98. <https://doi.org/10.1111/imig.12133>
- MacFadden, M. (2023, January 27). Universities are Big Brands (So Why Don't We Treat Them as Such?). *SimpsonScarborough*. <https://simpsonscarborough.com/blog/universities-are-big-brands-so-why-dont-we-treat-them-as-such/>
- Mankiw, N. G. (2016, December 2). Want to Rev Up the Economy? Don't Worry About the Trade Deficit. *The New York Times*. <https://www.nytimes.com/2016/12/02/upshot/want-to-rev-up-the-economy-dont-worry-about-the-trade-deficit.html>
- Open, D. (2023, 2024). *IIE Open Doors / Primary Source of Funding*. IIE Open Doors / Primary Source of Funding. <https://opendoorsdata.org/data/international-students/international-students-primary-source-of-funding/>
- Organisation for Economic Co-operation and Development. (2025, March 17). *Global economic outlook uncertain as growth slows, inflationary pressures persist and trade policies cloud outlook*. <https://www.oecd.org/en/about/news/press-releases/2025/03/global-economic-outlook-uncertain-as-growth-slows-inflationary-pressures-persist-and-trade-policies-cloud-outlook.html>
- Orleans, L. (1988). *Read "Chinese Students in America: Policies, Issues, and Numbers" at NAP.edu*. National Academy Press. <https://doi.org/10.17226/743>
- Pamuk, H., & Pamuk, H. (2025, June 16). Trump administration weighs adding 36 countries to travel ban, memo says. *Reuters*. <https://www.reuters.com/world/us/trump-administration-weighs-adding-36-countries-travel-ban-memo-says-2025-06-15/>
- Rash, J. (2025, May 28). *American campuses need international students*. The Minnesota Star Tribune. https://www.startribune.com/american-campuses-need-international-students/601363448?utm_source=chatgpt.com
- Raymond, N., & Raymond, N. (2025, April 25). Trump administration to restore foreign students' legal status, for now. *Reuters*. <https://www.reuters.com/world/us/trump-administration-restore-foreign-students-legal-status-now-2025-04-25/>
- Salas-Velasco, M. (2021). Mapping the (mis)match of university degrees in the graduate labor market. *Journal for Labour Market Research*, 55(1), 14. <https://doi.org/10.1186/s12651-021-00297-x>
- Sapochnik, J. (2025, May 29). BREAKING: Trump Aggressively Targets International Students in New Visa Policies, Launches Assault on Higher Education. *Visa Lawyer Blog*. <https://www.visalawyerblog.com/breaking-trump-aggressively-targets-international-students-in-new-visa-policies-launches-assault-on-higher-education/>
- Scarborough, S. (2024). *The Higher Ed CMO Has Arrived And So Have Expectations*. <https://cmo-study.simpsonscarborough.com/>
- Sherman, B. (2025, April 17). International students infuse tens of millions of dollars into local economies across the US. *The Conversation*. <https://medium.com/the-conversation/international-students-infuse-tens-of-millions-of-dollars-into-local-economies-across-the-us-1f5a4e6a4ad6>
- Shih, K. (2017, December). *Do international students crowd-out or cross-subsidize Americans in higher education?* - ScienceDirect. *Journal of Public Economics*. https://www.sciencedirect.com/science/article/pii/S0047272717301676?casa_token=8ZY0-MhoZQAAAAA:TZFvIXCIKqfrvowvahGWXFePKpZVv-8oyHk8ToDcvMjkQ8vm_s8KYYOzdLEHiL-MxTQUQBskg

- Stuen, E. T., Mobarak, A. M., & Maskus, K. E. (2012). Skilled Immigration and Innovation: Evidence from Enrolment Fluctuations in us Doctoral Programmes. *The Economic Journal*, 122(565), 1143–1176. <https://doi.org/10.1111/j.1468-0297.2012.02543.x>
- Ting, F. (2025, March 14). *Republican legislation seeks to ban Chinese nationals from studying in the US*. AP News. <https://apnews.com/article/chinese-student-republican-visa-ban-946e613a8dace3b0092580fa6fe4e50b>
- Tourism Economics. (2025, June 1). *Visitor Economy*. Tourism Economics. <https://www.tourismeconomics.com/economic-impact/visitor-economy/>
- Treisman, R. (2025, June 9). Trump’s travel ban is now in effect. Here’s what to know. *NPR*. <https://www.npr.org/2025/06/09/nx-s1-5427998/trump-travel-ban-countries-immigration-enforcement>
- Tyson, J. (2025, May 5). *US service industry gains strength despite global trade war* | *CFO Dive*. CFO Dive. <https://www.cfodive.com/news/us-service-industry-gains-strengthen-global-trade-wrangle-tariffs-Trump-consumers-retail/747184/>
- UNESCO Institute for Statistics. (2018). *Higher education* | *UNESCO*. <https://www.unesco.org/en/higher-education>
- U.S. State Dept. (2025, April 30). Secretary Rubio: 100 Days of an America First State Department [Substack newsletter]. *U.S. Department of State*. https://statedept.substack.com/p/100-days-of-an-america-first-state-department?utm_medium=web
- Wen, W., Hu, D., & Hao, J. (2017). International students’ experiences in China: Does the planned reverse mobility work? *International Journal of Educational Development*. <https://doi.org/10.1016/j.ijedudev.2017.03.004>
- Zhou, Y., Jindal-Snape ,Divya, Topping ,Keith, & and Todman, J. (2008). Theoretical models of culture shock and adaptation in international students in higher education. *Studies in Higher Education*, 33(1), 63–75. <https://doi.org/10.1080/03075070701794833>

SESSION 12.6: FROM CAPTIVE CARE TO RESORT REWARDS: RETHINKING SERVICE MODELS

Moderators:

Becca Jones

Summary Brief

Offer Redemption Trends in Resort Loyalty Marketing: Evidence from 65 U.S. Resorts

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Loyalty programs play a critical role in customer engagement across resort and casino settings, yet actual offer redemption behavior remains understudied. This research analyzes redemption trends across 65 major U.S. resorts using a mixed-methods design. A dataset of 2,050 user reviews and 18 transcribed vlogs was coded for offer type, redemption outcome, and sentiment, supported by insights from 14 industry reports. Findings show significant variation by offer category: gaming credits had the highest redemption rate (30%), followed by food and beverage (25%) and hotel room comps (21%). Positive sentiment was strongly linked to successful redemptions, while confusion over blackout dates and unclear instructions were common barriers. Differences in brand performance (e.g., MGM vs. Caesars) reflected broader positioning strategies. The study offers practical guidance for resort marketers and contributes methodologically by integrating user-generated content with industry analysis to explore real-world loyalty outcomes.

Introduction

Resort loyalty programs are central to customer retention and competitive differentiation in the hospitality industry. In casino-resort settings, loyalty programs are especially critical, offering members targeted promotional offers such as gaming credits, comped nights, spa services, and exclusive event access. However, redemption behavior across these offers remains underexplored, especially in the context of AI-driven personalization. This study investigates actual redemption trends across 65 major U.S. resorts and identifies operational gaps, behavioral insights, and managerial implications. Using a blend of user-generated content and practitioner insights, this research uncovers emerging patterns in loyalty offer effectiveness and provides strategic implications for optimizing resort marketing outcomes.

Literature Review

Hospitality loyalty programs have evolved into sophisticated engagement ecosystems (Prentice et al., 2022), blending experiential rewards with behavioral tracking. Bradley and Wang (2024) emphasize the impact of tier-based program structures on customer satisfaction and retention, while Legg et al. (2023) identify emotional resonance as a critical driver of repeat visitation. Recent works (e.g., BestPractice.ai, 2024; ProfitOptics, 2025) highlight the increasing reliance on machine learning for segmentation and offer targeting.

However, redemption—the final behavioral outcome of such targeting—remains relatively underexamined. While marketing trade reports (GamblingSite.com, 2023) and analytics firms (ProfitOptics, 2025) promote AI's benefits in optimizing timing and content, few academic studies benchmark redemption rates across offer types or examine sentiment-reward linkages. Bird & Bird LLP (2024) also raise caution about the ethical and regulatory considerations of push-based offers, especially for gaming audiences. Our study fills this gap by synthesizing consumer review data and practitioner reports to quantify redemption trends and test strategic levers for improvement.

Methodology

This research employed a convergent mixed-methods approach to analyze redemption-related behavior across 65 U.S. resort loyalty programs. A sample of 2,050 user-generated reviews was collected from public platforms (TripAdvisor, Google) posted between January 2024 and March 2025. These reviews were filtered for loyalty tier indicators (e.g., “Diamond,” “Gold,” “Platinum”) and redemption experiences. Reviews were coded for: (a) referenced offer type, (b) inferred redemption success/failure, and (c) overall sentiment tone.

Cohen's kappa for interrater reliability reached $\kappa = 0.80$, indicating strong agreement. In addition, 18 loyalty-themed vlogs were transcribed and coded to triangulate themes and validate user perceptions of offer fairness, timing, and redemption friction. Reports from leading hospitality and AI-marketing firms ($n = 14$) further contextualized the behavioral patterns and proposition development.

Key Findings

Redemption behaviors varied significantly by offer type. Gaming credits led with the highest redemption rate at 30%, followed by food and beverage offers (25%) and hotel room comps (21%). Chi-square tests confirmed statistically significant differences across categories ($\chi^2(10) = 124.8, p < .001$).

Brand-specific analysis showed that MGM guests were 8 percentage points more likely to redeem entertainment offers than Caesars guests (41% vs. 33%), while Caesars guests were 4 points more likely to redeem wellness and spa offers. This aligns with brand positioning strategies observed in market reports (BestPractice.ai, 2024).

Redemption success was also associated with review sentiment: 58% of positive reviews referenced successful redemption experiences compared to only 34% of negative reviews ($\chi^2 = 92.7, p < .001$). Key barriers included confusing redemption instructions, blackout dates, and short expiration windows. These frictions often neutralized the perceived value of high-tier offers.

Practical and Research Implications

For resort marketers, this study provides actionable strategies to enhance the performance of loyalty programs through improvements in offer redemption. One critical area involves reducing operational friction—unclear redemption rules, poorly timed expiration windows, and confusing blackout restrictions often deter engagement, particularly among high-tier members. Simplifying these processes can significantly improve perceived value and fulfillment rates. Additionally, marketers should consider reframing offers using emotionally resonant language (e.g., “VIP Weekend Retreat”) rather than technical descriptors (“Comped Room”), which helps heighten desirability and customer connection.

Timing is another essential lever. Even without full AI infrastructure, behavioral cues—such as site visits, booking intent, or past redemption patterns—can guide more effective offer delivery. Messaging that reinforces loyalty status (e.g., “For Platinum Members Only”) can also enhance customer pride and increase conversion. Furthermore, integrating social listening into service design enables firms to monitor feedback on offer execution and adapt processes in real time. Finally, responsible gaming principles should be embedded in all gaming-related offers, ensuring transparency and promoting customer wellbeing.

From a scholarly perspective, this study advances hospitality marketing literature by addressing a critical gap: the actual behavioral outcomes of loyalty program targeting. Whereas prior research has emphasized design structures, tier benefits, or emotional attachment, this study shifts the focus to redemption—a measurable end behavior that connects strategic intent with customer action. Methodologically, the use of convergent mixed methods—including sentiment-coded user reviews, themed vlogs, and triangulation with practitioner reports—demonstrates a robust approach to capturing nuanced customer experience data at scale. The findings also contribute to emerging literature on AI-enhanced personalization in hospitality. By identifying offer types most likely to be redeemed, and linking those patterns with sentiment and brand-specific strategies, this research helps refine segmentation and targeting models. Moreover, the identification of friction points offers a basis for future experimental studies or A/B testing aimed at validating tactical interventions in message framing, timing, and format.

Future research may build on this work by incorporating CRM datasets to analyze demographic and behavioral segmentation, exploring longitudinal patterns of redemption across program lifecycles, or assessing how AI decision-support systems affect customer trust and redemption outcomes. As loyalty marketing becomes increasingly data-driven, real-world behavioral benchmarking—like that provided here—will be essential to theory development and practical success.

References

BestPractice.ai. (2024). Case study: Caesars Entertainment—personalization with machine learning.

Bird & Bird LLP. (2024). Applications of AI in the gambling industry.

- Bradley, G. T., & Wang, W. (2024). The casino loyalty paradigm: The moderating effect of membership tier. *International Journal of Hospitality & Tourism Administration*, 1–30.
<https://doi.org/10.1080/15256480.2024.2400718>
- Catchings, D. (2021). Building customer loyalty with millennials in the gaming entertainment industry.
- GamblingSite.com. (2023). How casinos use AI to track players and predict behavior.
- Legg, M., Webb, T., & Ampountolas, A. (2022). Marketing to the next generation of casino patrons. *Journal of Marketing Analytics*, 10, 89–101. <https://doi.org/10.1057/s41270-021-00131-w>
- Legg, M., Hancer, M., Tang, C. H. H., & Slevitch, L. (2023). Effects of emotions on casino visitation: A theory of planned behavior study. *Tourism Analysis*, 28(1), 69–85.
<https://doi.org/10.3727/108354223X16748508672288>
- ProfitOptics. (2025). 5 proven ways AI and analytics drive casino revenue and loyalty.
- Prentice, J. A., Prentice, C., & Moyle, B. (2022). The influence of customer experience with automated games and social interaction on customer engagement and loyalty in casinos. *Journal of Retailing and Consumer Services*, 64, 102830.

Summary Brief

When Service Providers Are Captive: Acute and Chronic Workplace Trauma in Service Delivery

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Service captivity has traditionally focused on consumers who cannot easily exit service interactions. However, many service providers also experience captivity when professional, ethical, or legal obligations prevent them from disengaging. We examine how acute trauma (singular critical incidents) versus chronic trauma (repeated low-level stressors) influences captive service providers' ability to provide consumer rapport and how it impacts consumer outcomes. By highlighting the provider side of service captivity, this research extends services marketing theory and clarifies how workplace trauma influences value co-creation.

Introduction

Service captivity occurs when consumers face constraints that limit autonomy during service interactions (Rayburn et al., 2020). However, captivity is not exclusive to consumers; service providers can also experience it when they are unable to disengage due to professional, ethical, or legal obligations. Examples include airline crew required to remain on duty during flights, healthcare professionals constrained by patient care responsibilities, or social workers bound to high-stakes cases. Captive providers are often exposed to trauma, which can be acute—stemming from singular distressing events—or chronic, resulting from repeated emotionally taxing interactions. While research has largely focused on consumers' experiences of captivity (Rayburn, 2015), little attention has been given to how providers' trauma affects the co-creation of value with consumers.

Literature Overview

In service encounters, value emerges from the reciprocal interaction between providers and consumers, with emotional engagement serving as a critical resource (Delpechitre et al., 2018). Rapport, defined as mutual trust and emotional connection, facilitates smooth communication and enhances consumer satisfaction, loyalty, and perceived well-being (Gremler & Gwinner, 2000). Provider captivity can amplify exposure to distress. Chronic trauma is a persistent exposure to emotionally demanding interactions and can deplete providers' emotional resources over time, resulting in compassion fatigue, a state of emotional exhaustion that reduces empathy and care (Ledoux, 2015). Acute trauma, on the other hand, may have short-term effects that are intense but temporary, allowing providers to recover and potentially heightening sensitivity and attunement in the interaction (Lilius et al., 2008). The interplay between trauma type, provider compassion, and rapport is critical because emotional presence underpins the co-creation of value. Compassionate providers are more likely to establish a strong rapport, which enhances consumers' sense of being understood and supported, fostering satisfaction and well-being.

Hypothesis Development

Trauma type is expected to influence providers' ability to display compassion. Chronic trauma repeatedly drains emotional resources and increases the risk of compassion fatigue, reducing providers' capacity for empathy (Ledoux, 2015). Acute trauma, while stressful, is typically episodic, allowing providers to recover and, in some cases, respond with heightened attunement (Lilius et al., 2008). Therefore, we hypothesize:

H1: Chronic trauma reduces provider compassion more than acute trauma.

Compassion is a central mechanism through which providers facilitate rapport with consumers. Emotional presence signals understanding and concern, strengthening interpersonal connection. Consequently:

H2: Higher provider compassion increases consumer-perceived rapport.

Rapport is linked to positive consumer outcomes. When consumers perceive strong rapport, they feel psychologically safe and emotionally supported, enhancing their overall well-being. Similarly, rapport fosters satisfaction by creating an experience where consumers feel valued and attended to:

H3: Greater consumer-perceived rapport increases consumer well-being.

H4: Greater consumer-perceived rapport increases consumer satisfaction.

Conclusion

Reframing service captivity to include providers highlights the downstream impact of trauma on value co-creation. Chronic trauma, by inducing compassion fatigue, compromises providers' emotional engagement, reducing rapport and ultimately affecting consumer satisfaction and well-being. Recognizing and addressing trauma in captive service roles is essential not only for provider well-being but also for sustaining high-quality service experiences. Future research should explore interventions to mitigate compassion fatigue, such as emotional support programs, resilience training, and organizational policies that reduce chronic exposure to traumatic encounters.

References

- American Psychological Association. (2018). Trauma. In APA Dictionary of Psychology.
- Bove, L. L. (2019). Empathy for service: Benefits, unintended consequences, and future research agenda. *Journal of Services Marketing*, 33(1), 31–43.
- Delpechitre, D., Beeler-Connelly, L. L., & Chaker, N. N. (2018). Customer value co-creation behavior: A dyadic exploration of the influence of salesperson emotional intelligence on customer participation and citizenship behavior. *Journal of Business Research*, 92, 9–24.
- Guidi, J., Lucente, M., Sonino, N., & Fava, G. A. (2020). Allostatic load and its impact on health: A systematic review. *Psychotherapy and Psychosomatics*, 90(1), 11–27.
- Jin, M. J., Kim, J. S., Lee, H. S., Kwon, Y. J., Shim, S. H., Choi, B. S., ... & Lee, H. Y. (2020). The impact of emotional exhaustion on psychological factors in workers with secondary traumatic experiences: A multi-group path analysis. *Psychiatry Investigation*, 17(11), 1064.
- Lilius, J. M., Worline, M. C., Maitlis, S., Kanov, J., Dutton, J. E., & Frost, P. (2008). The contours and consequences of compassion at work. *Journal of Organizational Behavior*, 29(2), 193–218.
- Ledoux, K. (2015). Understanding compassion fatigue: Understanding compassion. *Journal of Advanced Nursing*, 71(9), 2041–2050.
- Morales, A. C., Amir, O., & Lee, L. (2021). The psychology of well-being in consumer contexts. *Journal of Consumer Research*, 47(5), 731–758.
- Rayburn, S. W., Mason, M. J., & Volkers, M. (2020). Service captivity: No choice, no voice, no power. *Journal of Public Policy & Marketing*, 39(2), 155–168.
- Stavros, C., Westberg, K., Russell, R., & Banks, M. (2021). How positive service experiences contribute to service captivity. *Journal of Services Marketing*, 35(6), 774–790.
- Tax, S. S., McCutcheon, D., & Wilkinson, I. F. (2013). The Service Delivery Network (SDN): A customer-centric perspective of the customer journey. *Journal of Service Research*, 16(2), 243–261.
- Trzeciak, S., & Mazzarelli, A. (2019). Compassionomics: The revolutionary scientific evidence that caring makes a difference. Studer Group.
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1),

1-17.

Summary Brief

The Same Model for All? The Argument for a New Service Development Model

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Most models of new product development (NPD) are grounded in the development of tangible goods. However, the new service development (NSD) process presents unique challenges that these traditional models fail to address. This paper argues for the necessity of a distinct NSD process based on evidence from academic literature regarding customer participation, employee alignment, and communication inconsistencies. A particular focus is placed on the service marketing triangle between management, employees, and customers. Services are co-produced, intangible, and prone to communication breakdowns, which makes their development more vulnerable to failure without strategic integration of customer and employee insight. The paper concludes with recommendations for more integrated, employee-informed, and customer-driven NSD frameworks. Importantly, the content of this paper represents a comprehensive literature review that will serve as the foundation for future research.

Introduction

While NPD has a long history of structured models and well-documented best practices, much of the academic literature and applied frameworks are based on the development of tangible goods, notating an obvious gap in NSD research (Bullinger et al., 2003). These models, such as the Stage-Gate process, emphasize internal R&D, prototyping, and market testing. In contrast, NSD involves different dynamics, including customer co-production, simultaneous production and consumption, and a higher degree of employee involvement in delivery. As companies increasingly shift toward service-oriented offerings, the inadequacies of traditional NPD models become more evident. While authors have explored different NSD models, they are primarily focused on uncovering the nature and differentiation of NSD methods according to service types (Jaakkola et al., 2017). This paper explores the necessity of a distinct NSD framework, emphasizing employee involvement, customer participation, and integrated communication strategies. Since this paper proposes tying in the service triangle at the very beginning with the fuzzy front end, it is essential that all participants work collaboratively to accomplish a fast turnaround. This will require a systematic training process due to the fact that individual behavior, group dynamics, leadership styles, communication, organizational culture, conflict resolution, motivations, and satisfaction will all collectively have an impact on the NSD process and ultimately business outcomes. There should be a framework for selecting and training all parties involved prior to initiating the fuzzy front end in the NSD process. By tying in organizational behavior theories, we will explore this in more detail.

Future Research Direction: Developing a New NSD Model

This paper serves as the literature review for a broader research initiative aimed at developing a new model for NSD that not only differentiates service types, but that also considers the service marketing triangle, primarily focusing on this model during the fuzzy front end of the NSD process. Our future research will focus on services that are:

- Largely intangible
- Produced and consumed simultaneously
- Low in technological requirements
- Inexpensive to develop

We seek to distinguish our work not only from NPD models rooted in tangible goods but also from NSD models that apply to high-tech, capital-intensive services. The scope of our model is intentionally narrow to address a very specific but common class of services, such as adding valet parking to a restaurant with limited parking or offering a local delivery service for a small café. These are examples of services that require minimal infrastructure investment but are deeply dependent on employee delivery and customer perception.

This work aims to contribute a more grounded, practical NSD framework that reflects the realities of small service enhancements and day-to-day innovations in low-tech service environments. Our forthcoming research will involve qualitative interviews and field testing with service managers, frontline employees, and customers to co-develop a model that includes:

- A redefined fuzzy front end for rapid, inexpensive idea generation
- Tools for integrating employee feedback during concept development
- Communication alignment mechanisms across management, employees, and customers
- Low-cost prototyping and pilot testing methods suited to simple service innovations

Literature Review

Customer Participation in NSD

Customer participation plays a critical role in NSD, particularly in the early, uncertain stages of development. Alam (2006) found that involving customers helps reduce ambiguity in the fuzzy front end of service innovation. Customers contribute both "need information" and "solution information," making them valuable collaborators in shaping the service experience. Unlike in product development, where customer feedback is often collected post-design, services benefit from iterative co-creation during the design process.

Chang and Taylor (2016), in a meta-analysis of 40 empirical studies, confirmed that customer participation has a stronger effect on service outcomes than on goods. Their findings underscore the importance of integrating customer feedback early and continuously in the NSD process. Magnusson, Matthing, and Kristensson (2003) also support this view, showing that involving end-users in service design leads to more useful and innovative outcomes.

The Service Marketing Triangle: Management, Employees, and Customers

One of the most compelling reasons for a distinct NSD model lies in the communication dynamics between management, employees, and customers. The service marketing triangle illustrates the interactions among these three groups: external marketing (management to customer), interactive marketing (employee to customer), and internal marketing (management to employee).

When these channels are not aligned, service failures occur. Zeithaml, Bitner, and Gremler (2013) identify Gap 4 in the SERVQUAL model as the communications gap—the difference between what is promised in marketing communications and what is delivered by employees. If management promotes a personalized, high-touch experience, but employees are not trained or empowered to deliver it, customers perceive a service failure.

Employee Alignment and Emotional Labor

Employee dissatisfaction also plays a significant role in service failure. Hochschild (1983) introduced the concept of emotional labor, where employees must regulate their feelings to meet organizational display rules. Grandey (2003) found that surface acting—faking positive emotions—leads to emotional exhaustion and reduced service performance.

When employees are required to deliver services they do not support or believe in, the resulting emotional dissonance can cause withdrawal behaviors, disengagement, and even service sabotage (Chen, Huang, & Chu, 2024). These behaviors compromise service quality and undermine the success of new services.

Ignoring Employee Insight Leads to NSD Failure

Perhaps most critically, NSD efforts fail when frontline employees are excluded from the development process. Cadwallader et al. (2010) demonstrated that employees often have valuable insights into customer reactions and operational feasibility. When their perspectives are ignored, services are implemented that are difficult to execute or misaligned with customer needs.

Liao, Chou, and Lin (2015) found that failed service innovations can lead to customer avoidance, brand damage, and negative word-of-mouth. Their research highlights the importance of frontline employee involvement not just in delivery but in the design and testing phases of service innovation.

Reputational Risk of Service Failures

Another key reason NSD deserves a distinct approach is the reputational damage associated with service failures. Hess, Ganesan, and Klein (2003) found that service failures hurt a company's reputation more than product failures due to the personal and relational nature of services. Fisk, Brown, and Bitner (1993) further emphasized that customers hold companies more accountable for service breakdowns because they perceive the provider as more directly responsible.

This accountability increases the need for accurate messaging, well-prepared employees, and customer-informed development. In essence, service failures are not easily absorbed by the brand; they linger and erode trust.

Individual and Group Behavior

Individual personality impacts not only the way a person interacts with groups but also influences work productivity (Tao, 2024; Cubel et al). By assessing all participants' individual personality traits before finalizing a NSD team, there will be less risk involved in comprehension and implementation of ambiguous service development practices. This assessment will also provide insight into future interactions, relationships, and work productivity among all members of the group (Kramer et al., 2014). This includes understanding how individuals communicate, make decisions, work with others, and resolve conflicts in order to provide clarity on how they will work to achieve common goals. This will also uncover leadership styles, what motivates them, and how they view satisfaction.

Implications for NSD Practice

These findings carry several implications for how companies should approach NSD:

1. **Involve Customers Early:** Integrate customer feedback during the fuzzy front end of development, not just after launch.
2. **Engage Employees as Co-Creators:** Include frontline employees in ideation, concept testing, and pilot phases.
3. **Align Communication Across the Triangle:** Ensure marketing messages reflect operational realities and equip employees to deliver on brand promises.
4. **Address Emotional Labor:** Provide emotional support, autonomy, and training for employees asked to deliver new services.
5. **Monitor for Communication Gaps:** Use tools like the SERVQUAL model to identify and resolve disconnects between promotion and delivery.

Conclusion

New service development is fundamentally different from new product development due to its reliance on co-creation, its intangible and process-based nature, and its dependence on frontline employees for delivery. Traditional NPD models, built around tangible goods and internal R&D, fail to capture these dynamics. The literature shows that NSD requires a more integrated, participatory approach involving customers and employees from the outset. By understanding and managing the service marketing triangle and addressing emotional and operational challenges faced by employees, firms can reduce failure rates and enhance the success of their service innovations.

The difference between the usefulness of the traditional NPD model on services has been reviewed and documented in our literature review. Our future study will look at the differences between NSD research and models to see if there are distinct differences in advice for companies developing new services that distinguish between the complexity to develop new services and individual roles of each participant to produce the new services.

References

- Alam, I. (2006). Removing the fuzziness from the fuzzy front-end of service innovations through customer interactions. *Industrial marketing management*, 35(4), 468-480.
- Bullinger, H. J., Fähnrich, K. P., & Meiren, T. (2003). Service engineering—methodical development of new service products. *International Journal of Production Economics*, 85(3), 275-287.

- Cadwallader, S., Jarvis, C. B., Bitner, M. J., & Ostrom, A. L. (2010). Frontline employee motivation to participate in service innovation implementation. *Journal of the Academy of Marketing Science*, 38(2), 219-239.
- Chang, W., & Taylor, S. A. (2016). The effectiveness of customer participation in new product development: A meta-analysis. *Journal of Marketing*, 80(1), 47-64.
- Chen, Y. C., Huang, Z. L., & Chu, H. C. (2024). Relationships between emotional labor, job burnout, and emotional intelligence: an analysis combining meta-analysis and structural equation modeling. *BMC psychology*, 12(1), 672.
- Cubel, M., Nuevo-Chiquero, A., Sanchez-Pages, S., & Vidal-Fernandez, M. (2016). Do personality traits affect productivity? Evidence from the laboratory. *The Economic Journal*, 126(592), 654-681.
- Fisk, R. P., Brown, S. W., & Bitner, M. J. (1993). Tracking the evolution of the services marketing literature. *Journal of retailing*, 69(1), 61-103.
- Grandey, A. A. (2003). When “the show must go on”: Surface acting and deep acting as determinants of emotional exhaustion and peer-rated service delivery. *Academy of management Journal*, 46(1), 86-96.
- Hess Jr, R. L. (2008). The impact of firm reputation and failure severity on customers' responses to service failures. *Journal of Services Marketing*, 22(5), 385-398.
- Jaakkola, E., Meiren, T., Witell, L., Edvardsson, B., Schäfer, A., Reynoso, J., & Weitlaner, D. (2017). Does one size fit all? New service development across different types of services. *Journal of Service Management*, 28(2), 329-347.
- Kramer, A., Bhawe, D. P., & Johnson, T. D. (2014). Personality and group performance: The importance of personality composition and work tasks. *Personality and Individual Differences*, 58, 132-137.
- Liao, S., Chou, C. Y., & Lin, T. H. (2015). Adverse behavioral and relational consequences of service innovation failure. *Journal of Business Research*, 68(4), 834-839.
- Magnusson, P. R., Matthing, J., & Kristensson, P. (2003). Managing user involvement in service innovation: Experiments with innovating end users. *Journal of Service research*, 6(2), 111-124.
- Tao, Y. (2024). The Impact of Personality on Productivity and Job Performance. *Advances in Economics, Management and Political Sciences*, 121(1).
- Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2013). *Services marketing: Integrating Customer Focus Across the Firm* (6th ed.). McGraw-Hill Education.

**SESSION 12.7 PANEL: BEYOND BORDERS AND
ALGORITHMS: DESIGNING THE FUTURE OF
MARKETING EDUCATION**

Panelists:

Lubna Nafees

Githa Heggde

Monica Khanna

**SESSION 21.1 PANEL: SO YOU WANT TO BE A LEADER
IN A COLLEGE OF BUSINESS? WHAT YOU SHOULD
KNOW AND HOW TO PREPARE FOR
ADMINISTRATIVE ROLES**

Panelists:

Mike Wittmann

Tará Lopez

Barry BABIN

Lourinda Williams

SESSION 21.2: TRUST THE GREEN, TELL THE MISSION, MOVE THE NEEDLE

Moderator:

Kristina Harrison

Summary Brief

The Relationship Between Multi-Factor Corporate Social Responsibility and Consumer Happiness: Implications for Purchase Intention through Hedonic and Eudaimonic Pathways

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This study examines the impact of Corporate Social Responsibility (CSR) on consumer purchase intentions through a sequential mediation process that involves general happiness and its differentiation into hedonic and eudaimonic well-being. Using factorial invariance analysis across USA and Canadian samples (total $n = 847$), the research validates a hierarchical model in which CSR, mediated by happiness, impacts purchase intention. The results demonstrate full measurement invariance across both countries, supporting the model's cross-cultural validity. Additionally, the results suggest that a sequential pathway reveals stronger behavioral effects than direct CSR-purchase relationships.

Introduction

The study introduces a novel sequential mediation model in which Corporate Social Responsibility (CSR), conceptualized as a higher-order construct encompassing philanthropic, ethical-legal, and economic dimensions, serves as the initial driver, generating overall consumer happiness. This general happiness then differentiates into hedonic, pleasure-based, and eudaimonic, meaning-based well-being, which subsequently influences purchase intentions. This sequential understanding provides more nuanced predictions than traditional direct-effect or parallel-pathway models.

Three primary objectives guide this study. The first objective is to validate the multi-factor Corporate Social Responsibility (CSR) measurement model across cultures. The second objective is to examine the sequential mediation through general happiness to specific well-being types. Finally, the third objective is to establish the differential effects of hedonic versus eudaimonic pathways on purchase intentions.

Background

The theoretical foundation synthesizes insights from two key literatures. First, CSR has evolved from Carroll's (1979) pyramid model, which highlights the economic, legal, ethical, and philanthropic dimensions, into a holistic, multidimensional construct. Contemporary research indicates that when consumers perceive CSR initiatives as both comprehensive and authentic, they elicit synergistic effects on attitudes and behaviors rather than isolated responses to individual CSR dimensions (e.g., Groza, Pronschinske, & Walker, 2011).

Second, the psychological framework builds on the distinction between hedonic well-being, which focuses on pleasure and positive affect, and eudaimonic well-being, which emphasizes meaning and self-realization (Huta & Waterman, 2014). This distinction aligns closely with recent conceptualizations of consumer happiness as a multidimensional construct that integrates immediate affective reactions with longer-term evaluations of congruence, purpose, and emotional harmony (Cuesta-Valiño, Gutiérrez-Rodríguez, & Contreras-Contreras, 2023). In this view, happiness is not merely a byproduct of satisfaction or delight; it reflects a deeper consumer-brand relationship in which CSR initiatives can serve as catalysts for both short-term pleasure and enduring psychological fulfillment (de Azambuja et al., 2023). Recent research further demonstrated that sustainable consumption fosters both types of well-being: hedonic enjoyment from feeling good about one's choices and eudaimonic fulfillment from contributing to broader societal goals (Ramos-Hidalgo et al., 2021). This dual-pathway model, in which multidimensional CSR first influences general happiness and then differentiates into hedonic and eudaimonic

benefits, is essential for understanding how CSR initiatives can lead to lasting behavioral change rather than merely transient positive impressions (Ramos-Hidalgo et al., 2021).

Table 1. Compositional Invariance Results

Construct	Correlation	5% Quantile	Construct	Correlation	5% Quantile
CSR	0.9999	0.9996	Happiness	1.0000	0.9996
Philanthropic	0.9999	0.9997	Eudaimonic	1.0000	0.9997
Economic	0.9998	0.9996	Hedonic	1.0000	0.9991
Ethical-Legal	0.9999	0.9998	Purchase Intent	0.9998	0.9992

Analyses and Findings

Empirical Model Structure: SmartPLS 4 (Ringle et al., 2024) software was used to conduct Partial Least Squares Structural Equation Modeling (PLS-SEM) and to examine factorial invariance through the Measurement Invariance of Composite Models (MICOM) procedure. The sample consisted of consumers from the United States (n = 405) and Canada (n = 406). The hierarchical model included a second-order CSR construct composed of three first-order dimensions: a seven-item philanthropic factor, an eight-item ethical-legal factor, and a three-item economic factor. The model also incorporated mediating constructs, with general happiness leading to both hedonic well-being, measured by four items, and eudaimonic well-being, measured by three items. The outcome variable was purchase intention, measured by four indicators. All constructs demonstrated strong psychometric properties, with Average Variance Extracted (AVE) values ranging from 0.59 to 0.78 and composite reliability coefficients ranging from 0.88 to 0.95.

Measurement Invariance Results: The MICOM analysis revealed strong measurement invariance between the U.S. and Canadian consumer samples. Compositional invariance was confirmed for all constructs, with correlation values approaching or equal to 1.0000 and all exceeding their respective 5% quantile thresholds. The three-dimensional Corporate Social Responsibility (CSR) construct demonstrated near-perfect alignment across groups. The mediating and outcome constructs, including general happiness, hedonic well-being, eudaimonic well-being, and purchase intention, also exhibited full compositional invariance (see Table 1 for compositional invariance correlation values and associated 5% quantile thresholds).

Mean and variance equality were also established for all constructs. The 95% confidence intervals for mean differences and variance ratios all included zero, indicating no statistically significant differences between U.S. and Canadian respondents. This confirms that both the average levels and variability of responses are equivalent across groups for each construct in the model (see Table 2 for mean difference and variance ratio results, along with their 95% confidence intervals). Together, these findings support full measurement invariance across both compositional and distributional parameters. As a result, the CSR model can be confidently interpreted and applied across both national contexts, validating the use of standardized CSR strategies in North America.

Table 2. Mean and Variance Equality Tests

Construct	Mean Difference	95% CI	Variance Ratio	95% CI
CSR	0.1347	[-0.130, 0.129]	-0.1420	[-0.144, 0.149]
Philanthropic	0.0597	[-0.133, 0.131]	-0.0738	[-0.181, 0.177]
Economic	0.1286	[-0.130, 0.131]	-0.1076	[-0.142, 0.143]
Ethical-Legal	0.1035	[-0.130, 0.129]	-0.1404	[-0.145, 0.146]
Happiness	0.1287	[-0.132, 0.128]	0.0290	[-0.209, 0.210]

Eudaimonic	0.0973	[-0.129, 0.130]	-0.0551	[-0.191, 0.191]
Hedonic	0.1309	[-0.131, 0.127]	0.0633	[-0.213, 0.222]
Purchase Intent	0.1345	[-0.127, 0.131]	-0.0009	[-0.198, 0.200]

The validated model revealed a sequential mediation process through which CSR influences consumer behavior. First, multidimensional CSR significantly enhanced general happiness ($\beta = 0.68$, $p < 0.001$), indicating that CSR initiatives initially generate broad positive emotional responses. In the next stage, general happiness differentiated into two forms of well-being: hedonic well-being ($\beta = 0.74$, $p < 0.001$) and eudaimonic well-being ($\beta = 0.71$, $p < 0.001$). These forms of well-being, in turn, positively predicted purchase intention, with hedonic well-being showing a slightly stronger effect ($\beta = 0.42$, $p < 0.001$) compared to eudaimonic well-being ($\beta = 0.38$, $p < 0.001$).

A significant direct effect of CSR on purchase intention was also observed ($\beta = 0.21$, $p < 0.01$). However, the total indirect effect through the sequential mediation pathway was substantially stronger (0.51), confirming that the happiness-mediated route is the primary mechanism through which CSR drives consumer purchase intentions. These findings highlight the importance of emotional and psychological processes in translating CSR perceptions into behavioral outcomes.

Discussion

This study demonstrates that CSR influences consumer purchase intentions primarily through a sequential psychological process rooted in the concepts of happiness and well-being. Rather than exerting influence through a simple direct effect, CSR has a positive direct impact on both their eudaimonic and hedonic consumer happiness. This suggests that when consumers perceive a company as ethical, sustainable, and socially committed, they not only experience pleasurable emotions and immediate satisfaction (hedonic) but also develop a deeper sense of purpose, connection, and personal fulfillment (eudaimonic). The multidimensional CSR construct is reliable across U.S. and Canadian samples, confirming that these psychological mechanisms operate similarly across cultural contexts. These findings emphasize that consumers' emotional and cognitive responses to CSR, not just their rational evaluations, are central to driving purchase behavior, underscoring the importance of designing CSR initiatives that foster both personal satisfaction and a sense of meaningful contribution.

Although the data are cross-sectional, there is some support for the hypothesized causal ordering of purchase intention (Anand & Sundaram, 2025). However, future research could consider a study that manipulates a brand's corporate responsibility, examines its impact on happiness levels, and finally examines how this manipulated happiness predicts purchase intention. Such an experimental approach would allow researchers to establish that manipulating CSR activities causally affects happiness, which then drives changes in behavioral intentions.

References

- Anand, A., & Sundaram, N. (2025). The Impact of CSR-Induced Happiness on Sustainable Consumption Behavior (SDG 12): Exploring the Mediating Role of Customer-Company Identification. *Journal of Lifestyle and SDGs Review*, 5(1), e04209. <https://doi.org/10.47172/2965-730X.SDGsReview.v5.n01.pe04209>
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*, 4(4), 497–505. <https://doi.org/10.5465/amr.1979.4498296>
- Cuesta Valiño, P., Gutiérrez Rodríguez, P., & García Henche, B. (2024). The impact of corporate social responsibility on consumer brand engagement and purchase intention at fashion retailers. *Psychology & Marketing*, 41(2), 234–251. <https://doi.org/10.1002/mar.21916>

- de Azambuja, G. M. P., Rodriguez Peña, G. A., & Vargas, E. G. T. (2023). The impact of customer engagement on customer happiness. *Journal of Consumer Behaviour*, 22(4), 1025–1041. <https://doi.org/10.1002/cb.2147>
- Groza, M. D., Pronschinske, M. R., & Walker, M. (2011). Perceived organizational motives and consumer responses to proactive and reactive CSR. *Journal of Business Ethics*, 102(4), 639–652. <https://doi.org/10.1007/s10551-011-0834-0>
- Huta, V., & Waterman, A. S. (2014). Eudaimonia and its distinction from hedonia: Developing a classification and terminology for understanding subjective well-being. *The Journal of Positive Psychology*, 9(6), 497–513. <https://doi.org/10.1080/17439760.2014.910819>
- Ramos Hidalgo, E., Díaz Carrión, R., & Rodríguez Rad, C. (2021). Does sustainable consumption make consumers happy? *Marketing Review*, 21(3), 301–318. <https://doi.org/10.1362/146934721X16176435551036>
- Ringle, C. M., Wende, S., & Becker, J.-M. (2024). SmartPLS 4 [Computer software]. SmartPLS GmbH. <https://www.smartpls.com>

Full Paper

Green Gaze: An Eye-Tracking Study on Consumer Attention and Trust in Online Green Marketing Messaging

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Greenwashing, a term that refers to misleading environmental claims, undermines authentic green marketing efforts by eroding consumer trust. While green marketing emphasizes transparency and genuine sustainability, many companies use greenwashing tactics that confuse or deceive consumers. This study explores the differences between greenwashing and authentic green marketing using eye-tracking technology, examining how consumers engage visually with advertisements. We further investigate how emotional and rational message framing affects visual attention and perceptions of authenticity, trust, and purchase intent. Our findings offer theoretical contributions to the understanding of visual attention in environmental messaging and provide managerial insights into crafting credible green campaigns.

Keywords

Greenwashing, green marketing, emotional appeal, eye-tracking, authenticity, purchase intention

Introduction

Approximately 62% of green claims made by companies in various industries are considered misleading or outright false, revealing a significant gap in transparency and consumer trust (Ha et al., 2022; Robertson et al., 2023). Hence, the importance of researching greenwashing versus authentic Green Marketing in marketing is an important topic. This phenomenon, widely known as "greenwashing," entails companies promoting their products or policies as environmentally friendly while failing to deliver on those claims. In contrast, authentic Green Marketing involves substantive commitments to sustainable practices, transparency, and ethical operations, which reflect a genuine concern for environmental and social welfare (Avcilar & Demirgünes, 2016; Ramtiyal et al., 2023; Teichmann et al., 2024).

In recent years, the distinction between authentic Green Marketing initiatives and greenwashing has had significant implications for consumer behavior, corporate reputation, and environmental outcomes. Consumers are increasingly aware of the risks associated with greenwashing, leading to skepticism towards companies' environmental commitments (Kahraman & Kazançoğlu, 2019; G. Liu et al., 2024; Mu & Lee, 2023). This skepticism is detrimental to brands engaging in deceptive practices, as it diminishes consumer trust and adversely affects purchase intentions (Kommuri & Arumugam, 2024; Torelli et al., 2019). Researchers examined how persistent greenwashing creates negative perceptions of Green Marketing that can damage a corporation's public image (Teichmann et al., 2024). Conversely, transparency in Green Marketing can build consumer loyalty and increase brand equity, as consumers are more likely to support brands that demonstrate consistent environmental and social integrity (Kahraman & Kazançoğlu, 2019; Leckie et al., 2021; S. Wang et al., 2024).

Given there is a pressing need to research on this topic, the research gap persists in understanding the mechanisms through which greenwashing influences consumer perceptions and decision-making processes. Current literature has explored dimensions such as the psychological effects of greenwashing on consumer trust and behavior, but comprehensive models integrating Green Marketing frameworks and consumer behavior are still underdeveloped (G. Liu et al., 2024; Majeed & Kim, 2022; Nisa et al., 2022; Volschenk et al., 2022). This lack of in-depth studies hampers marketing strategies that can effectively differentiate authentic Green Marketing from

manipulative greenwashing. It indicates a need for further investigation in this area by academics and practitioners alike (Kumar & Suresh, 2024; Nisa et al., 2022; Szabo & Webster, 2021).

One innovative approach to studying consumer responses to greenwashing is through eye-tracking technology. Eye-tracking provides empirical evidence about consumer attention, engagement, and information processing capabilities when exposed to marketing communications (Ganesh & Sudhamaheswari, 2024; Irawati et al., 2023). By utilizing eye-tracking studies, researchers can gain insights into how consumers visually navigate advertisements and promotional materials that exhibit green claims, revealing potential contradictions between visual cues and textual content. These can inform organizations on how to maintain consumer trust while effectively presenting their Green Marketing initiatives (Junior et al., 2019; Sari & Windijarto, 2023). Moreover, eye-tracking can reveal how consumers evaluate claims regarding environmental sustainability. For example, researchers conducted qualitative research on consumer perceptions of natural-claimed products, highlighting how these perceptions differ based on the authenticity of green claims (Kahraman & Kazançoğlu, 2019). Eye movement patterns can help identify which particular green claims provoke consumer scrutiny or skepticism, enabling marketers to revise their messaging for improved authenticity and transparency (Caldas et al., 2021; Qayyum et al., 2022). Furthermore, advancing eye-tracking studies regarding greenwashing can help brands optimize their communication strategies to resonate more authentically with environmentally conscious consumers. Consumers' past experiences with brands that engage in greenwashing significantly shape their expectations and perceptions of new marketing initiatives (Li et al., 2025; Pimonenko et al., 2020). Therefore, understanding these behaviors through eye-tracking can assist companies in avoiding missteps associated with deception and greenwashing, allowing for a transition towards truly sustainable marketing strategies that cultivate long-term consumer relationships (Akturan, 2018; Kahraman & Kazançoğlu, 2019; Santos et al., 2022).

In this study, I will thus examine how consumers view authentic green marketing versus greenwashing with the help of eye-tracking technology and lab experiments. I will also combine functional and emotional cues in the given scenarios to see if consumers can differentiate between these types of advertisements and which one they prefer the most. So, the objective of this study is two: firstly, I will examine if eye tracking can help us identify consumers' differentiation strategies for green marketing vs green washing and secondly, we will combine these ads with functional and emotional cues to see their reactions and subsequent attitudes regarding those ads. Ultimately, the implications of this research extend beyond marketing strategy; they also influence regulatory bodies and policies surrounding sustainability and corporate governance. Recent trends show that government regulations have become stricter regarding environmental claims, emphasizing the urgent need for authentic Green Marketing efforts and penalizing greenwashing practices (Dutta-Powell et al., 2024; Schmuck et al., 2018). Consequently, policymakers could benefit from eye-tracking studies and related research to better regulate environmental communications and protect consumers from misleading marketing tactics (Aguila et al., 2024; Du et al., 2023; Natasya et al., 2023).

In conclusion, examining the distinctions of greenwashing versus authentic Green Marketing is critically important in marketing, particularly as consumers demand greater accountability and transparency from corporations. Further exploration of this essential area can significantly contribute to academic literature by providing comprehensive frameworks that elucidate the interplay between consumer perceptions, corporate practices, and the efficacy of various communication strategies. This study will not only enhance our understanding of environmental marketing dynamics but will also guide practitioners in adapting their approaches to foster trust and authenticity amid an increasingly skeptical consumer landscape.

Hypotheses development

Visual attention

Studies exploring the dynamics of emotional and rational messaging have shown that emotional appeals are more effective in engaging consumers' attention and interest in Green Marketing campaigns. The emotional richness embedded in visual narratives often yields higher engagement and recall compared to purely rational messaging, emphasizing the pivotal role of emotion in visual storytelling within Green Marketing contexts (Andreu et al., 2015; Chung & Lee, 2020). To understand how emotional and rational Green Marketing messages compete for visual attention, we can employ eye-tracking technology. By allowing researchers to monitor where and how long individuals focus their gaze when exposed to different types of messages, eye-tracking provides insights into attentional biases tied to emotional engagement (Maurage et al., 2021; Mrkva et al., 2019). Studies have demonstrated that visual elements, particularly those imbued with emotional content, not only capture attention more effectively but also sustain it, leading to deeper processing of the messages presented (Bi et al., 2019; Oliveira et al., 2022). This suggests that emotional Green Marketing communications are more likely to generate audience engagement and enhance overall information retention.

Research indicates that emotional content can induce a broader attentional scope, making individuals more receptive to additional content presented alongside emotionally charged visuals (Boelens et al., 2021). Presence of emotionally charged visuals stimulates a more profound cognitive processing mechanism, where consumers seek to understand the narrative being portrayed (Kamran & Siddiqui, 2019; Pyle et al., 2022). This broader focus contrasts sharply with that following rational appeals, which tend to direct attention toward specific details rather than the holistic message. The activation of emotional responses has been associated with an increase in cognitive processing and lasting impressions of the message, contributing to a higher likelihood of action, such as donations or social sharing (Paula et al., 2022; Turner, 2022). Moreover, the effectiveness of emotional appeals in visual communication has been emphasized across various studies. Emotionally charged visuals in Green Marketing campaigns not only draw attention but enhance brand loyalty and consumer attachment (Chung & Lee, 2020). In contrast, rational appeals, while informative, often lack the same degree of emotional resonance, leading to diminished viewer engagement (Andreu et al., 2015). Additionally, rational Green Marketing ads, which focus on statistical data, logical arguments, or objective facts, may not elicit the same level of engagement. Viewers often skim through these ads more quickly, resulting in shorter fixation times on the presented information. This trend reflects a more analytical processing style, where viewers are less emotionally invested and focus primarily on evaluating the logic of the claims made (Gilal et al., 2023; Y. Liu et al., 2023). In such cases, the heat maps generated from eye-tracking technology typically show less concentrated visual attention on any single point of interest compared to emotional ads (Shi & Jiang, 2023; Zhao, 2023). This distinction underlines the importance of crafting Green Marketing messages that not only inform but also evoke feelings, thereby resonating more significantly with the audience. In the realm of social media, where visual content predominates, emotional Green Marketing messages can perform better than rational ones on platforms like Instagram or Facebook (Chae, 2021; Kwon & Lee, 2021). The combination of eye-catching visuals and emotionally resonant narratives aids in attracting viewers' attention amid competing content. This scenario may explain why emotional content is often more shareable, as users are likely to engage with content that evokes a strong emotional response over more factual, unemotional posts (Salmones et al., 2021; Turner, 2022).

Using eye-tracking in this context involves examining not just the duration of gaze on particular elements of Green Marketing messages but also patterns of gaze transitions that indicate emotional engagement. For instance, participants often show longer fixation times on faces expressing emotions within visuals than on neutral objects. Such findings suggest that visuals specifically designed to elicit empathy or compassion sustain viewers' visual attention long after the initial glance (Guo et al., 2023; Sawada & Sato, 2015). Moreover, the implications of eye-tracking studies extend beyond mere attention metrics. They provide valuable insights into how different demographic segments respond to emotional and rational appeals. By analyzing where individuals focus their gaze and how long they dwell on emotional versus rational ads, marketers can better tailor their strategies to maximize engagement within specific target groups (Amien et al., 2024; Wang et al., 2025). Emotional ads often resonate well with consumers' intrinsic motivations, encouraging participation in Green Marketing initiatives and prompting actions such as donations or community involvement (Vrtana & Krizanovna, 2023).

Additionally, the design of Green Marketing materials benefits from insights provided by eye-tracking studies. By understanding which elements of a design draw attention due to their emotional cues, marketers and communicators can optimize visual strategies to create more compelling narratives that resonate with their target demographic (Fu et al., 2023). Therefore, companies can leverage these insights to ensure that their Green Marketing communications not only reach but also significantly impact their audiences. On a broader scale, it is essential to understand how emotional resonance in Green Marketing messaging aligns with effective marketing strategies.

Emotional narratives frequently outperform rational appeals, prompting stakeholders to form emotional connections with brands. This is due in part to the understanding that positive emotional experiences associated with a Green Marketing initiative can lead to favorable brand associations and long-term loyalty from consumers (Harris et al., 2018; Negoro & Santoso, 2024). Furthermore, the implications of the psychological underpinnings of attention and emotion are profound. Research suggests that individuals' cognitive and emotional responses significantly inform how they process Green Marketing narratives; intense emotional reactions may lead to heightened awareness and long-lasting impacts (Fan et al., 2018; Zubair et al., 2020). Understanding the intricate relationship between emotional engagement and visual attention provides marketers with actionable insights to tailor messages that fulfill both emotional and informational functions in Green Marketing.

Psychological theories supporting attention and emotion also reinforce the need for companies to integrate emotional elements into their Green Marketing communications actively. Affective Theory posits that emotional stimuli are better at capturing attention than neutral stimuli across various contexts, suggesting that emotional Green Marketing messages will have broader and deeper implications for consumer behavior than rational communications (Lafont et al., 2022; H. Liu et al., 2016). Eye-tracking studies thus affirm the superiority of emotional over rational messaging and provide a scientific framework for harnessing emotional stimuli effectively within Green Marketing initiatives. The robustness of findings supporting visual engagement and emotional relevance underscores the strategic importance of emotional narratives in communicating social responsibility at all corporate levels (Anderson et al., 2017; Belarmino et al., 2024).

In conclusion, emotional Green Marketing messages are more effective than rational messages in capturing visual attention, as supported by substantial evidence. Eye-tracking technology provides an insightful approach to measuring attention distribution and engagement levels with these messages. By understanding the interplay between emotional content and visual attention, companies can craft impactful Green Marketing narratives that resonate more deeply with their audiences and cultivate lasting connections. Based on this, we hypothesize:

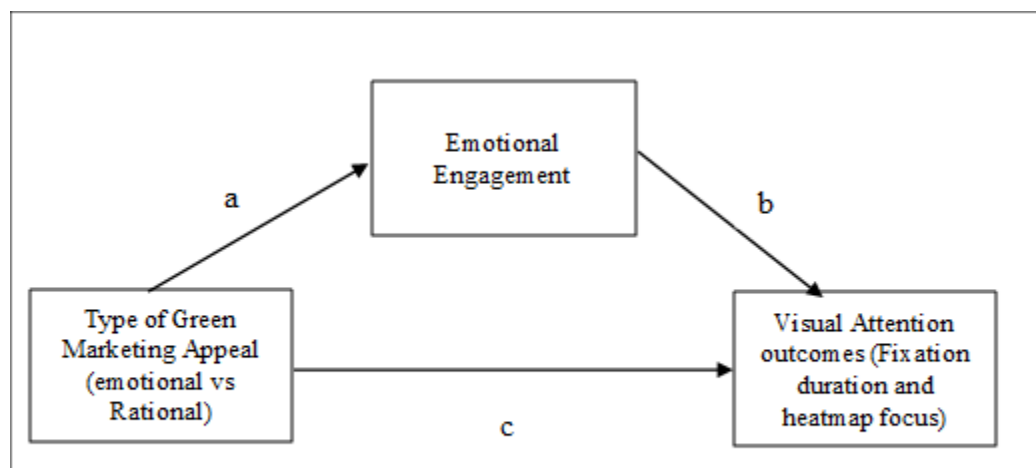


Figure 1: Conceptual framework for the eye tracking part of the study

H1:

Emotional Green Marketing ads will generate longer fixations and more focused heatmaps on visual focal points (e.g., faces) compared to rational Green Marketing ads.

Greenwashing content

In recent years, the emergence and prevalence of greenwashing, where organizations portray themselves as more environmentally friendly than they genuinely are—has significant implications for consumer behavior and trust. Greenwashing manifests variably, impacting how consumers perceive and interact with sustainability claims presented by companies. One notable effect of greenwashing is the tendency for consumers to exhibit increased skepticism, leading to heightened attention towards disclaimers or credibility cues. This response illustrates the growing wariness among consumers when they encounter potentially misleading environmental claims. Research indicates that greenwashing directly correlates with increased consumer skepticism. Confidence in company sustainability claims diminishes when consumers perceive discrepancies between advertised green initiatives and actual corporate practices (Xu et al., 2023). This skepticism translates into fragmented attention, compelling consumers to scrutinize corporate communications more closely, particularly disclaimers or credibility-enhancing elements. Researchers further corroborate these findings by noting that when consumers believe green marketing practices may be disingenuous, they are more inclined to investigate the validity of environmental claims, often concentrating their attention on cues that affirm credibility (Ramtiyal et al., 2023). This fragmentation of focus exemplifies a psychological defense mechanism, whereby consumers safeguard themselves against deception. The attributes of greenwashing that elicit increased scrutiny vary. Factors such as the degree of perceived deception influence consumer engagement strategies. As perceptions of environmental uncertainty rise, consumers exhibit heightened attention toward companies' sustainability disclosures, often seeking verification through third-party certifications or explicit disclaimers (Avcilar & Demirgünes, 2016). This need for external validation contributes to the phenomenon of increased scrutiny, as individuals navigate through a plethora of claims to discern the truth of a company's sustainability narrative. Inconsistency between green claims and actual company practices can culminate in increased consumer doubt, complicating the decision-making process as consumers allocate attention towards evaluating credibility cues and disclaimers (Xu et al., 2023). Moreover, it is vital to consider the role of messaging formats and clarity of information presented in green marketing. Research indicates that vague or unclear messaging can exacerbate consumer distrust, leading to even greater scrutiny of such claims (Yang et al., 2025). Consumers forced to decode complex or misleading messages may experience cognitive overload, causing them to focus disproportionately on disclaimers intended to mitigate perceived risks. Thus, the lack of clarity induces a defensive consumer behavior where attention becomes fragmented across multiple information sources, undermining the effectiveness of green marketing efforts in establishing trust and credibility. Furthermore, as consumers encounter misleading environmental claims, their cognitive resources become increasingly taxed. Consumers facing greenwashing engage in additional cognitive evaluations, ultimately detracting from their overall brand experience (Quoquab et al., 2021). This mental effort is primarily driven by the necessity to discern authenticity, prompting consumers to concentrate more heavily on credibility indicators that may alleviate their perceived risk of falling victim to greenwashing. Such behavior elucidates a broader market implication—consumers may become disenchanted not only with individual brands but also with the entire concept of Green Marketing if they perceive widespread greenwashing in the market (Ha et al., 2022).

Attending to disclaimers and credibility cues becomes even more pronounced when considering technological platforms where greenwashing occurs. Social media, for instance, has been identified as a double-edged sword in this context. While it can amplify legitimate green initiatives, it equally provides a forum for greenwashing, creating confusion among consumers who strive to navigate these less-than-transparent claims (de Jong et al., 2020). Social media exposure can intensify the discrepancies between reality and the image projected through marketing efforts, fostering an environment where consumers are increasingly vigilant about the claims they encounter (Ren et al., 2024). This awareness subsequently leads to fragmented consumer attention, as individuals parse through various channels to assess the legitimacy of environmental assertions. Further complicating this landscape is the influence of corporate strategy on consumer fixation patterns. Firms that engage in greenwashing often favor certain messaging tactics intended to distract from actual environmental performance (Alizadeh et al., 2023). When companies prioritize marketing strategies over substantive sustainability efforts, they inadvertently cultivate an atmosphere of mistrust that provokes consumers to increase their focus on identifying greenwashing tactics and claims. This consumer adaptation ultimately becomes a necessary response mechanism characterized by increased attention to potentially misleading environmental disclosures.

The implications of this attentional shift are profound, suggesting a potential backlash against greenwashing practices in terms of consumer brand loyalty and purchasing intentions. A growing body of literature, posits that as skeptics become wary of corporate intentions, their willingness to purchase green products diminishes, reflecting a strategic pivot toward value-driven consumption patterns (Teichmann et al., 2024). Consumer anxiety regarding greenwashing can positively correlate with increased cognitive engagement, resulting in a cyclical pattern whereby brands perceived to engage in greenwashing face heightened scrutiny, necessitating continual adjustments in their marketing strategies. To address this recovery of trust among consumers, organizations must convey transparency and consistently substantiate their claims through verifiable actions. As consumers continue to develop more sophisticated models for evaluating sustainability claims, reliance on credibility cues becomes increasingly essential (Sari & Windijarto, 2023). Firms that leverage authentic sustainability initiatives and reinforce these with trustworthy disclosures are likely to enhance consumer engagement, reduce skepticism, and mitigate the perceptual gaps created by the greenwashing phenomenon in the marketplace.

Ultimately, the effects of greenwashing are not confined to individual perceptions; they influence broader market dynamics and consumer behavior. The complexity of consumer responses to green marketing amid greenwashing requires researchers and practitioners to explore the mechanisms by which skepticism shapes attention and decision-making processes. By analyzing and addressing the myriad ways in which greenwashing shapes consumer behavior, companies may better align their sustainability strategies with genuine consumer expectations, fostering a more trustworthy and engaged market (Chitaka, 2021). As we navigate this multifaceted landscape of sustainable marketing and consumer behavior, it is evident that addressing greenwashing's inherent challenges requires ongoing collaboration between organizations, consumers, and regulators. By enhancing consumer education on sustainability and legitimate green advertising practices, stakeholders may collaboratively cultivate a more trustworthy and sustainable marketplace that not only mitigates the negative impacts of greenwashing but also champions genuine environmental initiatives for future generations (Mu & Lee, 2023).

***H2:** Greenwashing content will result in more scattered fixations and higher attention to disclaimers or credibility cues.*

Perceived Authenticity and Skepticism

Consumer perception of green authenticity after viewing advertisements is a critical area of research, with crucial implications for understanding the decision-making processes of environmentally conscious consumers. When exposed to advertisements that promote green products, consumers engage in interpreting the authenticity of the messages conveyed, which can significantly influence their purchasing intentions. Authentic green marketing, characterized by genuine environmental commitments, contrasts sharply with greenwashing—a deceptive practice where companies exaggerate or falsely claim environmental benefits to enhance their brand image. This duality creates a complex relationship between perceived authenticity, advertisement effectiveness, and purchase intentions.

Research indicates that consumers are likely to form their perceptions of green authenticity based on various cues within advertisements, including emotional and cognitive appeals. Positive emotional advertising tends to resonate with consumers, enhancing their perceived authenticity of the brand and subsequently driving purchase intentions (Fatemi et al., 2023). This sentiment is supported by findings from Song & Kim (2018), which indicates that emotional connection and nature-relatedness significantly influence consumers' intentions to purchase green apparel, showcasing the importance of emotional engagement in advertisements. Furthermore, advertisements that present clear, credible messages about sustainability can enhance consumer trust and authenticity perceptions, aligning with recognized attributes of effective green marketing (Carrión-Bósquez et al., 2024; Ganz & Grimes, 2018).

In contrast, advertisements that lack authentic representation or are perceived as greenwashing may lead to skepticism among consumers. Individuals often develop heightened sensitivity to the veracity of green claims, influenced by their previous experiences and increased awareness of deceptive practices. Research indicates that consumers evaluate the credibility of green advertising and may opt for non-green products when they detect inconsistencies between advertised claims and actual corporate behavior (Jog & Singhal, 2020; Liao & Wu, 2024). This demonstrates how perceptions of greenwashing can undermine the relationship between authentic green marketing efforts and consumer purchase intentions, leading to reduced trust and engagement with the brand.

Furthermore, the role of consumer education is critical in shaping perceptions of green authenticity. Informed consumers are more discerning regarding the green claims made by businesses. A lack of consumer understanding about green advertising can hinder the effectiveness of these campaigns, ultimately affecting purchase intentions (Kashyap & Saraswat, 2024). Moreover, the quality of green advertising information directly affects consumer responses, underscoring the necessity for transparency and accurate information in building trust (J. Wang & Li, 2022). Effective communication about genuine environmental efforts helps distinguish authentic brands from those engaging in greenwashing.

However, it is essential to recognize that consumer skepticism towards green advertising is prevalent, particularly in today's era of heightened environmental awareness and corporate scrutiny. Misleading advertisements can lead to broader distrust of green marketing as a whole, negatively influencing consumer behavior. Consumers who are aware of greenwashing practices are likely to become critical of brands that engage in such deceptive practices (Urbański & Haque, 2020). This skepticism can inhibit the effectiveness of authentic marketing campaigns if consumers are not convinced of the brand's sincerity.

In conclusion, the relationship between consumer perception of green authenticity and marketing strategies is complex but pivotal for influencing purchase intentions. Authentic green marketing strategies foster trust and engagement, while greenwashing practices can lead to consumer skepticism and reduced purchasing behavior. As consumers become more educated and discerning about green claims and practices, brands must prioritize authenticity in their marketing efforts. This strategic focus will bolster consumer trust and play a vital role in achieving broader environmental goals through increased support for genuinely sustainable products and practices. Hence, we hypothesize:

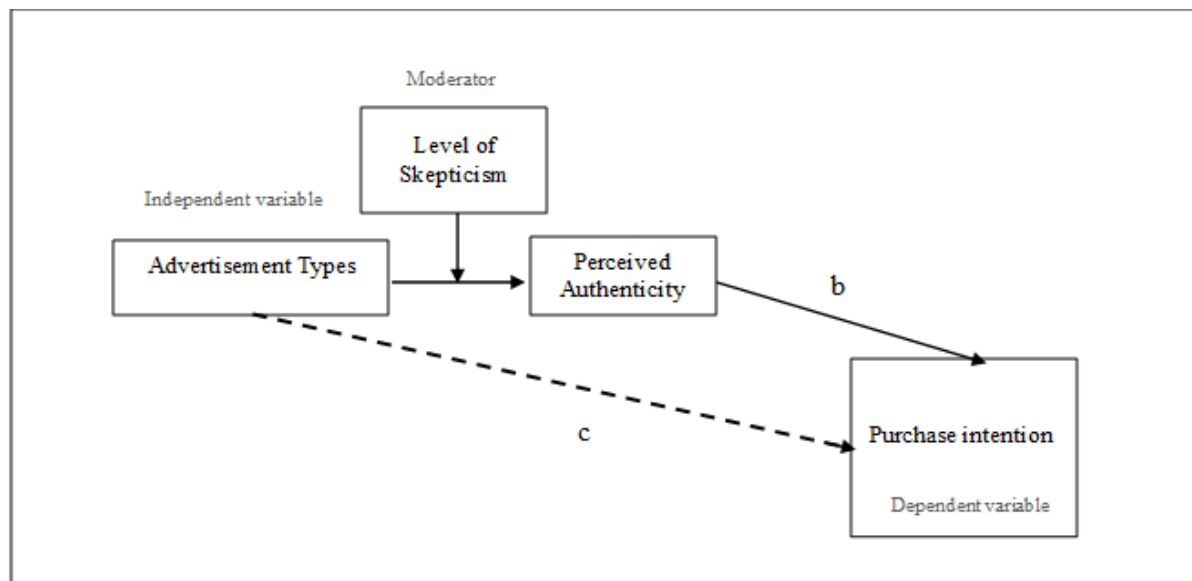


Figure 2: Conceptual framework of the experimental part of the study

a **H3:** The relationship between ad types and purchase intention will be mediated by perceived authenticity and moderated by consumers' skepticism.

Methodology

Experimental Design

The present study aims to examine the interaction between advertising appeal type (emotional vs. rational) and the perceived authenticity of green marketing (authentic vs. greenwashing) on consumer responses. Specifically, the study will investigate how these two dimensions influence consumers' attitudes toward a brand, perceived trust, and purchase intent for an eco-friendly disinfectant product. The research adopts a 2 (emotional vs. rational appeal) $\times$ 2 (authentic green marketing vs. greenwashing) between-subjects experimental design. Each participant will be randomly assigned to one of the four experimental conditions.

The study will be conducted online via Prolific, a reputable crowdsourcing platform for academic research. 200 participants will be recruited, with 50 participants assigned to each condition. Participants will be required to be between the ages of 18 and 65, fluent in English, and based in the United States. A minimum approval rate of 95% on Prolific will also be set as an eligibility criterion to ensure high data quality. Participants will be compensated according to the platform's pay standards, with the estimated completion time being around 3-4 minutes.

The experimental stimuli will consist of four variations of an advertisement for the fictional product GermXel Ultra Clean. All versions will use the same product image, but the ad copy and ingredient descriptions will differ depending on the experimental condition. The emotional appeal versions will emphasize family safety, warmth, and personal well-being, using emotionally evocative language. In contrast, the rational appeal versions will highlight facts about the product's performance, ingredient composition, and hygiene effectiveness. Meanwhile, the authentic green marketing versions will include specific, verifiable eco-claims and a clear list of natural ingredients (e.g., tea tree oil, eucalyptus, lemon peel). The greenwashing versions will use vague, unsubstantiated terms such as "eco-friendly" and "green-certified" without providing clear evidence or details, mimicking common greenwashing practices seen in real-world advertising. The pictures and scenarios which will be used in this study are given in Appendix A.

Participants will first complete an informed consent form and will then be randomly exposed to one of the four ad conditions via an embedded survey platform – Qualtrics. After viewing the ad, participants will complete a series of questionnaire items designed to assess the key dependent variables: (1) Perceived authenticity, (2) Skepticism, (3) Emotional Engagement and (4) Purchase intention. Additional exploratory measures may include emotional engagement and perceptions of ad effectiveness. Demographic information, including age, gender, and self-reported eco-consciousness, will also be collected at the end of the survey. Measurement scales are added in Appendix B.

Eye tracking

To complement the self-reported measures and gain deeper insight into participants' visual attention and processing of the advertisements, eye tracking technology will be employed during the experiment. Specifically, participants will be asked to complete the study using a device equipped with a webcam, and web-based eye-tracking software (such as Sticky by Tobii, RealEye, or similar) will be integrated with the advertisement presentation. This will allow for non-invasive tracking of gaze behavior as participants view the ad stimulus assigned to their condition. Eye tracking metrics such as total fixation duration, time to first fixation, and number of fixations will be recorded for predefined Areas of Interest (AOIs), including the product image, brand name, ingredient list, and green claims. These data will help assess which elements of the ad capture the most visual attention and whether participants attend differently to authentic versus greenwashed claims, or to emotional versus rational messaging. Eye tracking will also serve as a process measure to verify whether participants are cognitively engaging with the message as expected based on their condition. For example, longer fixation times on the ingredient list or eco-claims in rational-greenwashing conditions may indicate increased scrutiny or skepticism. These behavioral data will enrich the interpretation of the self-reported measures, offering a more nuanced understanding of how message framing and green marketing authenticity influence attention, perception, and ultimately, consumer judgment.

Data Analysis Plan

The data analysis will incorporate both eye-tracking metrics and survey-based measures to provide a comprehensive understanding of how participants process and respond to the green marketing advertisements. These

methods will allow the study to assess not only what participants say about the ads but also how they visually engage with them in real time.

First, fixation count and fixation duration will be analyzed for specific Areas of Interest (AOIs) within each advertisement. These AOIs will include key visual and textual elements such as the brand logo, product image, ingredient list, eco-claims. Fixation count will indicate how frequently a participant's gaze returns to a given AOI, while fixation duration will reflect how long their attention remains on that element. Higher fixation counts and durations in areas such as the ingredient list or green claims can suggest deeper cognitive processing, particularly relevant for evaluating the authenticity of green marketing. These metrics will be compared across the four experimental conditions using ANOVA to identify significant differences in attention allocation.

In addition, heatmaps and gaze path visualizations will be generated to identify common focal areas and attention flow patterns across participants in each condition. Heatmaps will provide a visual summary of collective attention, highlighting the most viewed sections of the ad in terms of gaze intensity. Gaze paths will illustrate the sequence in which viewers scan the ad, showing how they move from one AOI to another. This will help determine whether emotional appeals, for example, guide attention toward faces or emotionally charged imagery, while rational appeals may lead participants to focus on text-heavy information like ingredients and factual claims.

The study will also measure Time to First Fixation (TTFF) for each AOI to assess the attention-grabbing power of different ad elements. A shorter TTFF indicates that an element captured attention quickly upon ad exposure. By comparing TTFF across conditions, researchers can evaluate whether emotional messaging draws immediate attention to imagery or brand logos, whereas rational messaging might direct quicker attention to textual content or statistics. TTFF will be particularly useful for understanding first impressions and initial engagement, which are critical in digital ad environments where consumer attention spans are short.

For the survey-based measures, participants' responses will be analyzed using independent samples t-tests and two-way ANOVAs based on the 2 (emotional vs. rational appeal) $\times$ 2 (authentic vs. greenwashing) design. The independent variables will be different ad types, mediators will include perceived green authenticity and the dependent variable will be purchase intention. The ANOVA will test for main effects of each factor and potential interaction effects, such as whether emotional appeals perform better in authentic green marketing scenarios, or whether greenwashing is particularly detrimental when paired with rational messages. If significant effects are found, post-hoc analyses using Tukey's HSD will be conducted to explore differences between specific groups.

Together, the eye-tracking and survey data will be triangulated to provide both behavioral and attitudinal insights. This mixed-method approach will enable the study to draw robust conclusions about how advertising appeal and green marketing authenticity affect not only what consumers think, but also how they look and process environmental marketing messages.

References

- Aguila, C. I. G., Arellano, M. del P. C., Vega, M. A. R., Mondragón, E. M. B., Castro, M. del P. Q., & Castro, G. A. Q. (2024). Trends in Scientific Production on Greenwashing based on Scopus (1990-2023). *International Journal of Energy Economics and Policy*, 14(4), Article 4. <https://doi.org/10.32479/ijeeep.16281>
- Akturan, U. (2018). How does greenwashing affect green branding equity and purchase intention? An empirical research. *Marketing Intelligence & Planning*, 36(7), 809–824. <https://doi.org/10.1108/MIP-12-2017-0339>
- Alizadeh, L., Liscio, M. C., & Sospiro, P. (2023). The Phenomenon of Greenwashing In The Fashion Industry: A Conceptual Framework. CEST2023, Athens, Greece. <https://doi.org/10.30955/gnc2023.00363>
- Amien, N. N., Harjanti, W., & Arevin, A. T. (2024). Corporate Social Responsibility and Virtual Reality: A Synergistic Approach to Building Sustainable Brand Image. *International Journal of Social and Human*, 1(2), Article 2. <https://doi.org/10.59613/b34g1839>
- Anderson, N. E., Steele, V. R., Maurer, J. M., Rao, V., Koenigs, M. R., Decety, J., Kosson, D. S., Calhoun, V. D., & Kiehl, K. A. (2017). Differentiating emotional processing and attention in psychopathy with functional

- neuroimaging. *Cognitive, Affective, & Behavioral Neuroscience*, 17(3), 491–515.
<https://doi.org/10.3758/s13415-016-0493-5>
- Andreu, L., Casado-Díaz, A. B., & Mattila, A. S. (2015). Effects of message appeal and service type in CSR communication strategies. *Journal of Business Research*, 68(7), 1488–1495.
<https://doi.org/10.1016/j.jbusres.2015.01.039>
- Avçilar, M., & Demirgünes, B. (2016). Developing Perceived Greenwash Index and Its Effect on Green Brand Equity: A Research on Gas Station Companies in Turkey. *International Business Research*, 10(1), Article 1.
<https://doi.org/10.5539/ibr.v10n1p222>
- Belarmino, A., Whalen, E. A., & Guzzo, R. F. (2024). The impact of message framing on perceptions of controversial CSR in hotels. *International Hospitality Review*, ahead-of-print(ahead-of-print).
<https://doi.org/10.1108/IHR-12-2022-0062>
- Bi, T., Du, Y., Wang, X., Sang, N., Zhang, F., Kou, H., Zhu, Q., & Qiu, J. (2019). Modulations of emotional attention and spatial attention on human visual cortical activities. *Psychology Research and Behavior Management*, 12, 375–384. <https://doi.org/10.2147/PRBM.S188121>
- Boelens, E., Van Beveren, M.-L., De Raedt, R., Verbeken, S., & Braet, C. (2021). Are Emotion Regulation Strategies Associated With Visual Attentional Breadth for Emotional Information in Youth? *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.637436>
- Caldas, M. V. de A., Veiga-Neto, A. R., Guimarães, L. G. de A., Castro, A. B. C. de, & Pereira, G. R. B. (2021). Greenwashing in environmental marketing strategy in the brazilian furniture market. *Revista de Economia e Sociologia Rural*, 59, e225336. <https://doi.org/10.1590/1806-9479.2021.225336>
- Carrión-Bósquez, N. G., Veas-González, I., Naranjo-Armijo, F., Llamo-Burga, M., Ortiz-Regalado, O., Ruiz-García, W., Guerra-Regalado, W., & Vidal-Silva, C. (2024). Advertising and Eco-Labels as Influencers of Eco-Consumer Attitudes and Awareness—Case Study of Ecuador. *Foods*.
<https://doi.org/10.3390/foods13020228>
- Chae, M.-J. (2021). Driving Consumer Engagement through Diverse Calls to Action in Corporate Social Responsibility Messages on Social Media. *Sustainability*, 13(7), Article 7.
<https://doi.org/10.3390/su13073812>
- Chitaka, T. Y. (2021). Environmentalism or greenwashing? Responses of South African value chain actors to plastic straw marine pollution. *South African Journal of Science*, 117(7/8), Article 7/8.
<https://doi.org/10.17159/sajs.2021/9042>
- Chung, S., & Lee, S. Y. (2020). Cognitive processing of corporate social responsibility campaign messages: The effects of emotional visuals on memory. *Media Psychology*, 23(2), 244–268.
<https://doi.org/10.1080/15213269.2019.1591999>
- de Jong, M. D. T., Huluba, G., & Beldad, A. D. (2020). Different Shades of Greenwashing: Consumers' Reactions to Environmental Lies, Half-Lies, and Organizations Taking Credit for Following Legal Obligations. *Journal of Business and Technical Communication*, 34(1), 38–76. <https://doi.org/10.1177/1050651919874105>
- Du, S., El Akremi, A., & Jia, M. (2023). Quantitative research on corporate social responsibility: A quest for relevance and rigor in a quickly evolving, turbulent world. *Journal of Business Ethics*, 187(1), 1–15.
- Dutta-Powell, R., Rhee, J. J., & Wodak, S. (2024). Two interventions for mitigating the harms of greenwashing on consumer perceptions. *Business Strategy and the Environment*, 33(2), 882–903.
<https://doi.org/10.1002/bse.3520>

- Fan, C., Wan, C., Zhang, J., Jin, Z., & Li, L. (2018). Repetitive transcranial magnetic stimulation over right intraparietal sulcus enhances emotional face processing in the left visual field. *NeuroReport*, 29(10), 804. <https://doi.org/10.1097/WNR.0000000000001034>
- Fatemi, H., Leijerholt, U., Rezvani, Z., & Schnittka, O. (2023). Consumer Responses to Sustainable Product Branding Strategies: A literature Review and Future Research Agenda. *Baltic Journal of Management*. <https://doi.org/10.1108/bjm-11-2022-0412>
- Fu, H., Meng, J., Chen, Y., Cai, W., Lai, J., & Ma, H. (2023). Enhancing the Effectiveness of Cause-Related Marketing: Visual Style, Self-Construal, and Consumer Responses. *Sustainability*, 15(18), Article 18. <https://doi.org/10.3390/su151813379>
- Ganesh, R. S., & Sudhamaheswari, T. (2024). Effects of Greenwashing Practices on Consumer Perception. *Shanlax International Journal of Arts, Science and Humanities*, 11(S3-Feb), Article S3-Feb. <https://doi.org/10.34293/sijash.v11iS3-Feb.7244>
- Ganz, B., & Grimes, A. (2018). How Claim Specificity Can Improve Claim Credibility in Green Advertising. *Journal of Advertising Research*. <https://doi.org/10.2501/jar-2018-001>
- Gilal, F. G., Gilal, N. G., Martinez, L. F., & Gilal, R. G. (2023). Do all brand CSR initiatives make consumers happy? The role of CSR-brand (mis)fit and sense of relatedness. *Journal of Product & Brand Management*, 32(6), 942–957. <https://doi.org/10.1108/JPBM-01-2022-3849>
- Guo, M., Kwon, M., Hwang, M., & Zhou, Y. (2023). Eye Perception and Preference Difference between Different Emotional Content on TikTok and Twitter Platforms. *Journal of Multimedia Information System*, 10(2), 153–162. <https://doi.org/10.33851/JMIS.2023.10.2.153>
- Ha, M.-T., Ngan, V. T. K., & Nguyen, P. N. D. (2022). Greenwash and green brand equity: The mediating role of green brand image, green satisfaction and green trust and the moderating role of information and knowledge. *Business Ethics, the Environment & Responsibility*, 31(4), 904–922. <https://doi.org/10.1111/beer.12462>
- Harris, A., Parke, A., & Griffiths, M. D. (2018). The Case for Using Personally Relevant and Emotionally Stimulating Gambling Messages as a Gambling Harm-Minimisation Strategy. *International Journal of Mental Health and Addiction*, 16(2), 266–275. <https://doi.org/10.1007/s11469-016-9698-7>
- Irawati, Prananingtyas, P., & Wulan, R. C. (2023). Regulation Urgency of the Misleading “Greenwashing” Marketing Concept in Indonesia. *IOP Conference Series: Earth and Environmental Science*, 1270(1), 012007. <https://doi.org/10.1088/1755-1315/1270/1/012007>
- Jog, D., & Singhal, D. (2020). Greenwashing Understanding Among Indian Consumers and Its Impact on Their Green Consumption. *Global Business Review*. <https://doi.org/10.1177/0972150920962933>
- Junior, S. B., Martínez, M. P., Correa, C. M., Moura-Leite, R. C., & Silva, D. D. (2019). Greenwashing effect, attitudes, and beliefs in green consumption. *RAUSP Management Journal*, 54(2), 226–241. <https://doi.org/10.1108/RAUSP-08-2018-0070>
- Kahraman, A., & Kazançoğlu, İ. (2019). Understanding consumers’ purchase intentions toward natural-claimed products: A qualitative research in personal care products. *Business Strategy and the Environment*, 28(6), 1218–1233. <https://doi.org/10.1002/bse.2312>
- Kamran, Q., & Siddiqui, D. A. (2019). The Impact of Emotional Advertising on Consumer Buying Behavior for Home Appliance Products in Pakistan. *Business and Management Horizons*, 7(1), Article 1. <https://doi.org/10.5296/bmh.v7i1.14410>

- Kashyap, A., & Saraswat, S. (2024). Green Advertising Through the Eyes of the Youth: A Study on Environmentally Responsible Behaviour. *International Journal of Environment and Climate Change*.
<https://doi.org/10.9734/ijecc/2024/v14i13906>
- Kommuri, U. K., & Arumugam, T. (2024). Greenwashing Unveiled: How It Impacts Stakeholder Perception as well as Sustainability Realities. *Shanlax International Journal of Arts, Science and Humanities*, 11(S3-Feb), Article S3-Feb. <https://doi.org/10.34293/sijash.v11iS3-Feb.7247>
- Kumar, R. V., & Suresh, C. (2024). A Study on Corporate Greenwashing on Manufacturing of Lithium Batteries of Electric Vehicle (EV). *Shanlax International Journal of Arts, Science and Humanities*, 11(S3-Feb), Article S3-Feb. <https://doi.org/10.34293/sijash.v11iS3-Feb.7235>
- Kwon, K., & Lee, J. (2021). Corporate social responsibility advertising in social media: A content analysis of the fashion industry's CSR advertising on Instagram. *Corporate Communications: An International Journal*, 26(4), 700–715. <https://doi.org/10.1108/CCIJ-01-2021-0016>
- Lafont, A., Rogé, J., Ndiaye, D., & Boucheix, J.-M. (2022). Road safety communication effectiveness: The roles of emotion and information in motorists' ability to detect vulnerable road users. *Cognition, Technology & Work*, 24(2), 333–349. <https://doi.org/10.1007/s10111-021-00692-x>
- Leckie, C., Rayne, D., & Johnson, L. W. (2021). Promoting Customer Engagement Behavior for Green Brands. *Sustainability*, 13(15), Article 15. <https://doi.org/10.3390/su13158404>
- Li, S., Saleh, M. S. M., & Huang, M. (2025). Green Marketing and Greenwashing Effects on Consumer Purchase of Electric Cars: The Moderating Role of Environmental Knowledge. *International Journal of Customer Relationship Marketing and Management (IJCRMM)*, 16(1), 1–21.
<https://doi.org/10.4018/IJCRMM.367599>
- Liao, Y., & Wu, L. (2024). The Influence of Brand Greenwashing on EV Purchase Intention: The Moderating Role of Consumer Innovativeness and Peer Brand Attitude. *World Electric Vehicle Journal*.
<https://doi.org/10.3390/wevj15070313>
- Liu, G., Qian, H., Shi, Y., Yuan, D., & Zhou, M. (2024). How do firms react to capital market liberalization? Evidence from ESG reporting greenwashing. *Corporate Social Responsibility and Environmental Management*, 31(5), 4329–4344. <https://doi.org/10.1002/csr.2808>
- Liu, H., Xu, M., Wang, J., Rao, T., & Burnett, I. (2016). Improving Visual Saliency Computing With Emotion Intensity. *IEEE Transactions on Neural Networks and Learning Systems*, 27(6), 1201–1213.
<https://doi.org/10.1109/TNNLS.2016.2553579>
- Liu, Y., Naveed, R. T., Kanwal, S., Khan, M. T., Dalain, A. F., & Lan, W. (2023). Psychology in action: Social media communication, CSR, and consumer behavior management in banking. *PLOS ONE*, 18(8), e0289281.
<https://doi.org/10.1371/journal.pone.0289281>
- Majeed, S., & Kim, W. G. (2022). A reflection of greenwashing practices in the hospitality industry: A scoping review. *International Journal of Contemporary Hospitality Management*, 35(3), 1125–1146.
<https://doi.org/10.1108/IJCHM-04-2022-0495>
- Maurage, P., Bollen, Z., Masson, N., & D'Hondt, F. (2021). Eye Tracking Studies Exploring Cognitive and Affective Processes among Alcohol Drinkers: A Systematic Review and Perspectives. *Neuropsychology Review*, 31(1), 167–201. <https://doi.org/10.1007/s11065-020-09458-0>
- Mohr, L. A., Eroğlu, D., & Ellen, P. S. (1998). The Development and Testing of a Measure of Skepticism Toward Environmental Claims in Marketers' Communications. *Journal of Consumer Affairs*, 32(1), 30–55.
<https://doi.org/10.1111/j.1745-6606.1998.tb00399.x>

- Morhart, F., Malär, L., Guèvremont, A., Girardin, F., & Grohmann, B. (2015). Brand authenticity: An integrative framework and measurement scale. *Journal of Consumer Psychology*, 25(2), 200–218.
- Mrkva, K., Westfall, J., & Van Boven, L. (2019). Attention Drives Emotion: Voluntary Visual Attention Increases Perceived Emotional Intensity. *Psychological Science*, 30(6), 942–954. <https://doi.org/10.1177/0956797619844231>
- Mu, H., & Lee, Y. (2023). Greenwashing in Corporate Social Responsibility: A Dual-Faceted Analysis of Its Impact on Employee Trust and Identification. *Sustainability*, 15(22), Article 22. <https://doi.org/10.3390/su152215693>
- Natasya, R., Ngatno, M. M., & Prabawani, B. (2023). THE EFFECT OF GREENWASHING PERCEPTION, GREEN WORD OF MOUTH, AND GREEN MARKETING ON H&M PURCHASE INTENTIONS IN JAKARTA. *Teorija in Praksa*, 60(3). <https://www.fdv.uni-lj.si/docs/default-source/tip/u%C4%8Dinek-zaznavanja-zelenega-zavajanja-zelenega-tr%C5%BEenja-od-ust-do-ust-in-zelenega-tr%C5%BEenja-namere-kupcev-pri-h-m-v-d%C5%BEakarti5e7cd2304f2c67bc8e26ff00008e8d04.pdf>
- Negoro, S. H., & Santoso, N. (2024). Exploring millennials' digital CSR communication expectations from Indonesian unicorn companies. *Jurnal Studi Komunikasi*, 8(1), 032–041. <https://doi.org/10.25139/jsk.v8i1.7560>
- Nisa, N. U., Mendoza, S. A. J., & Shamsuddinova, S. (2022). The Concept of Greenwashing and its Impact on Green Trust, Green Risk, and Green Consumer Confusion: A Review-Based Study. *JABS*, 8(3), 1–18.
- Oliveira, J. S., Ifie, K., Sykora, M., Tsoukoku, E., Castro, V., & Elayan, S. (2022). The effect of emotional positivity of brand-generated social media messages on consumer attention and information sharing. *Journal of Business Research*, 140, 49–61. <https://doi.org/10.1016/j.jbusres.2021.11.063>
- Olney, T. J., Holbrook, M. B., & Batra, R. (1991). Consumer responses to advertising: The effects of ad content, emotions, and attitude toward the ad on viewing time. *Journal of Consumer Research*, 17(4), 440–453.
- Paula, A. L. D. de, Lourenção, M., Giraldi, J. de M. E., & Oliveira, J. H. C. de. (2022). Effect of emotion induction on potential consumers' visual attention in beer advertisements: A neuroscience study. *European Journal of Marketing*, 57(1), 202–225. <https://doi.org/10.1108/EJM-06-2021-0448>
- Pimonenko, T., Bilan, Y., Horák, J., Starchenko, L., & Gajda, W. (2020). Green Brand of Companies and Greenwashing under Sustainable Development Goals. *Sustainability*, 12(4), Article 4. <https://doi.org/10.3390/su12041679>
- Pyle, E., Furnham, A., & McClelland, A. (2022). Corporate social and environmental responsibility advertising: Advertising effectiveness as a function of viewing context. *Journal of Brand Management*, 29(3), 301–310. <https://doi.org/10.1057/s41262-021-00269-z>
- Qayyum, A., Jamil, R. A., & Sehar, A. (2022). Impact of green marketing, greenwashing and green confusion on green brand equity. *Spanish Journal of Marketing - ESIC*, 27(3), 286–305. <https://doi.org/10.1108/SJME-03-2022-0032>
- Quoquab, F., Sivadasan, R., & Mohammad, J. (2021). “Do they mean what they say?” Measuring greenwash in the sustainable property development sector. *Asia Pacific Journal of Marketing and Logistics*, 34(4), 778–799. <https://doi.org/10.1108/APJML-12-2020-0919>
- Ramtiyal, B., Garg, P., Johari, S., Rathore, A. P. S., & Thakrey, A. (2023). Investigating the effects of corporate social responsibility on sustainable consumer purchase behavior. *Journal of Global Operations and Strategic Sourcing*, 17(1), 1–27. <https://doi.org/10.1108/JGOSS-03-2023-0014>

- Ren, J., Wu, P., & Hou, L. (2024). Social media attention and corporate greenwashing: Evidence from China. *Corporate Social Responsibility and Environmental Management*, 31(6), 5446–5465. <https://doi.org/10.1002/csr.2875>
- Robertson, J. L., Montgomery, A. W., & Ozbilir, T. (2023). Employees' response to corporate greenwashing. *Business Strategy and the Environment*, 32(7), 4015–4027. <https://doi.org/10.1002/bse.3351>
- Salmones, M. del M. G.-D. los, Herrero, A., & Martinez, P. (2021). CSR communication on Facebook: Attitude towards the company and intention to share. *International Journal of Contemporary Hospitality Management*, 33(4), 1391–1411. <https://doi.org/10.1108/IJCHM-09-2020-1054>
- Santos, C., Coelho, A., & Marques, A. (2022). Does Greenwashing Affect Employee's Career Satisfaction? The Mediating Role of Organizational Pride, Negative Emotions and Affective Commitment. *Research Square*. <https://doi.org/10.21203/rs.3.rs-1197221/v2>
- Sari, D. Y., & Windijarto, W. (2023). THE MITIGATING FACTORS OF GREENWASHING: A SYSTEMATIC LITERATURE REVIEW. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 7(3), Article 3. <https://doi.org/10.31955/mea.v7i3.3582>
- Sawada, R., & Sato, W. (2015). Emotional attention capture by facial expressions. *Scientific Reports*, 5(1), 14042. <https://doi.org/10.1038/srep14042>
- Schmuck, D., Matthes, Jörg, & Naderer, B. (2018). Misleading Consumers with Green Advertising? An Affect–Reason–Involvement Account of Greenwashing Effects in Environmental Advertising. *Journal of Advertising*, 47(2), 127–145. <https://doi.org/10.1080/00913367.2018.1452652>
- Shi, J., & Jiang, Z. (2023). Competence or warmth: Why do consumers pay for green advertising? *Asia Pacific Journal of Marketing and Logistics*, 35(11), 2834–2857. <https://doi.org/10.1108/APJML-01-2023-0002>
- Song, S. Y., & Kim, Y. (2018). A Human-Centered Approach to Green Apparel Advertising: Decision Tree Predictive Modeling of Consumer Choice. *Sustainability*. <https://doi.org/10.3390/su10103688>
- Szabo, S., & Webster, J. (2021). Perceived Greenwashing: The Effects of Green Marketing on Environmental and Product Perceptions. *Journal of Business Ethics*, 171(4), 719–739. <https://doi.org/10.1007/s10551-020-04461-0>
- Teichmann, F. M. J., Wittmann, C., Boticiu, S. R., & Sergi, B. S. S. (2024). Can the consumer perception of corporate social responsibility be saved? An examination into the effects of corporate greenwashing on the consumer and financial market. *Journal of Financial Crime*, 31(6), 1320–1331. <https://doi.org/10.1108/JFC-11-2023-0303>
- Torelli, R., Balluchi, F., & Lazzini, A. (2019). Greenwashing and Environmental Communication: Effects on Stakeholders' Perceptions (SSRN Scholarly Paper 3470659). Social Science Research Network. <https://doi.org/10.2139/ssrn.3470659>
- Turner, K. D. (2022). Actions in the spotlight: Differential effects of corporate social responsibility actions on organizational celebrity. *Corporate Social Responsibility and Environmental Management*, 29(4), 860–870. <https://doi.org/10.1002/csr.2240>
- Urbański, M., & Haque, A. ul. (2020). Are You Environmentally Conscious Enough to Differentiate Between Greenwashed and Sustainable Items? A Global Consumers Perspective. *Sustainability*. <https://doi.org/10.3390/su12051786>
- Volschenk, J., Gerber, C., & Santos, B. A. (2022). The (in)ability of consumers to perceive greenwashing and its influence on purchase intent and willingness to pay. *South African Journal of Economic and Management Sciences*, 25(1), Article 1. <https://doi.org/10.4102/sajems.v25i1.4553>

- Vrtana, D., & Krizanova, A. (2023). The Power of Emotional Advertising Appeals: Examining Their Influence on Consumer Purchasing Behavior and Brand–Customer Relationship. *Sustainability*, 15(18), Article 18. <https://doi.org/10.3390/su151813337>
- wang, jianguo, sun, xixiang, zhang, wei, jia, yige, & li, you. (2025). The Evolution of Consumer Emotions in Response to Rhetorical Strategies in Corporate Social Responsibility Advertising: Evidence from Chinese Social Networks Before and After the COVID-19 Pandemic. *Research Square*. <https://doi.org/10.21203/rs.3.rs-5697919/v1>
- Wang, J., & Li, A. (2022). The Impact of Green Advertising Information Quality Perception on Consumers’ Response: An Empirical Analysis. *Sustainability*. <https://doi.org/10.3390/su142013248>
- Wang, S., Lai, Y., & Zhang, S. (2024). Greening by digitization? Exploring the effect of enterprise digital transformation on greenwashing. *Business Strategy and the Environment*, 33(7), 6616–6639. <https://doi.org/10.1002/bse.3825>
- Xu, W., Li, M., & Xu, S. (2023). Unveiling the “Veil” of information disclosure: Sustainability reporting “greenwashing” and “shared value.” *PLOS ONE*, 18(1), e0279904. <https://doi.org/10.1371/journal.pone.0279904>
- Yang, X., Liu, B., Liu, Z., Zhang, J., & Sun, Q. (2025). Does Environmental Uncertainty Increase the Likelihood of Greenwashing? The Roles of Government Subsidies and Media Attention. *Corporate Social Responsibility and Environmental Management*, 32(2), 2616–2629. <https://doi.org/10.1002/csr.3086>
- Zhao, W. (2023). Understanding CSR Campaigns Through the Lens of Culture Values and Moral Emotion. *Journal of Creative Communications*, 18(3), 309–327. <https://doi.org/10.1177/09732586221143183>
- Zubair, M., Iqbal, S., Usman, S. M., Awais, M., Wang, R., & Wang, X. (2020). Message framing and self-conscious emotions help to understand pro-environment consumer purchase intention: An ERP study. *Scientific Reports*, 10(1), 18304. <https://doi.org/10.1038/s41598-020-75343-8>

Appendix A

Scenario 1: Emotional and Authentic Green Marketing

GermXel Ultra Clean – Natural Formula **Powerful. Pure. Naturally Safe.**

GermXel Ultra Clean is your all-in-one solution for a spotless, safe, and fresh-smelling home. Engineered to eliminate 99.9% of germs, bacteria, and viruses, it’s tough on dirt — but gentle enough for homes with children and pets. Formulated with **100% natural ingredients**, GermXel leaves no harmful residue behind and fills your space with a crisp, clean herbal scent.

Perfect for: ✓ Kitchen counters ✓ Baby toys & play areas ✓ Pet zones ✓ High-touch surfaces

Made with: • Tea Tree Oil • Eucalyptus Extract • Lemon Peel Oil • Vinegar • Plant-Based Surfactants

No parabens. No synthetic fragrances. No worries.

Scenario 2: Emotional and Greenwashing

GermXel Ultra Clean – Natural Formula **Powerful. Pure. Naturally Safe.**

GermXel Ultra Clean is your all-in-one solution for a spotless, safe, and fresh-smelling home. Engineered to eliminate 99.9% of germs, bacteria, and viruses, it's tough on dirt — but gentle enough for homes with children and pets. Formulated with **100% natural ingredients**, GermXel leaves no residue and works fast on contact for hospital-grade disinfection.

Perfect for: ✓ Kitchen counters ✓ Baby toys & play areas ✓ Pet zones ✓ High-touch surfaces

Made with: • Benzalkonium Chloride • Ethanol • Sodium Citrate • Propylene Glycol • Tea tree oil

No parabens. No artificial dyes. Maximum confidence.

Scenario 3: Rational and Authentic Green Marketing

 **GermXel Ultra Clean – Natural Formula**
Powerful. Pure. Naturally Safe.

GermXel Ultra Clean is your all-in-one solution for a spotless, safe, and fresh-smelling home. Engineered to eliminate 99.9% of germs, bacteria, and viruses, it's tough on dirt. Formulated with **100% natural ingredients**, GermXel leaves no harmful residue behind and fills your space with a crisp, clean herbal scent.

Perfect for: ✓ Kitchen counters ✓ Baby toys & play areas ✓ Pet zones ✓ High-touch surfaces

Made with: • Tea Tree Oil • Eucalyptus Extract • Lemon Peel Oil • Vinegar • Plant-Based Surfactants

No parabens. No synthetic fragrances. No worries.

Scenario 4: Emotional and Greenwashing

 **GermXel Ultra Clean – Natural Formula**
Powerful. Pure. Naturally Safe.

GermXel Ultra Clean is your all-in-one solution for a spotless, safe, and fresh-smelling home. Engineered to eliminate 99.9% of germs, bacteria, and viruses, it's tough on dirt. Formulated with **100% natural ingredients**, GermXel leaves no residue and works fast on contact for hospital-grade disinfection.

Perfect for: ✓ Kitchen counters ✓ Baby toys & play areas ✓ Pet zones ✓ High-touch surfaces

Made with: • Benzalkonium Chloride • Ethanol • Sodium Citrate • Propylene Glycol • Tea tree oil

No parabens. No artificial dyes. Maximum confidence.

Ad types

Table 1: Different ad types

	
Emotional and authentic	Rational and authentic
	
Emotional and greenwashing	Rational and greenwashing

Appendix B

Purchase Intention

Purchase intention is the dependent variable, measuring the likelihood that a consumer will buy the product (Han, Hwang, and Lee, 2017). This scale has excellent reliability (Cronbach's $\alpha = 0.92$). The following items assess this intention:

- PI 1: I will buy this product.
- PI 2: I am willing to buy this product.
- PI 3: I will make an effort to buy this product.

Skepticism

In this study, consumers' skepticism will be considered as a moderator. This scale has been adopted from Mohr et al. (1998). This four-item scale demonstrated good reliability (Cronbach's $\alpha = .79$) and validity in the study.

- SK1: Most environmental claims made on package labels or in advertising are true. (reverse-coded)
- SK2: Because environmental claims are exaggerated, consumers would be better off if such claims on package labels or in advertising were eliminated.
- SK3: Most environmental claims on package labels or in advertising are intended to mislead rather than to inform consumers.
- SK4: I do not believe most environmental claims made on package labels or in advertising.

Perceived authenticity

This scale was taken from (Morhart et al., 2015). It has an excellent reliability (Cronbach's $\alpha = 0.94$).

- PA1: This advertisement felt genuine and truthful.
- PA 2: The message in the advertisement seemed honest and not exaggerated.
- PA3 : The advertisement made me trust the brand's values and intentions.
- PA 4: The product or brand in the advertisement appeared to be sincere and authentic.
- PA 5: This advertisement did not feel overly promotional or misleading.

Emotional Engagement

Emotional engagement reflects the extent to which an advertisement resonates with an individual on an affective level (Olney et al., 1991). It has an excellent reliability (Cronbach's $\alpha = 0.94$). The following items measure emotional engagement:

- EE1: I felt emotionally connected to this advertisement.
- EE2: This advertisement made me feel excited/happy/sentimental.
- EE3: The advertisement captured my attention and kept me engaged.
- EE4: I felt personally involved while watching this advertisement.
- EE5: The advertisement evoked strong emotions in me.

SESSION 21.3: WHEN VALUES COLLIDE: CIVILITY, CARE, AND CAMPUS TECH

Moderators:

Todd Bacile

Summary Brief

Cities that CARE: Challenges and Visions for Building Inclusive Cities

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Kimberly Taylor, Professor of Marketing, Florida International University, USA

In today's increasingly urbanized world, cities suffer from varied social, economic, and moral challenges and often fail to include all people equally in the city's revitalization. The main objective of this paper was to develop a framework to help marketplace actors engage in revitalization efforts and meet the challenges before them while ensuring no one is left out. Taking a unique mixed-methods approach by incorporating two secondary data studies and one qualitative study, we explored essential factors for an inclusive city and the responsibilities of each marketplace actor to ensure all residents feel they belong to the city. We found that larger cities are better at delivering a high quality of life to residents than smaller cities, driven by the fit between a city's culture with residents' lives. Analyzing residents' Twitter posts helped us understand what matters to residents and leaders. Finally, interviews with marketplace actors directly involved with the city's improvements facilitated our identifying complex challenges of developing an inclusive city. Based on the insights from three studies, we offer the CARE framework to help revitalize cities and present ways forward. We further outline each marketplace actor's responsibilities and recommended activities relating to the four pillars of the CARE framework.

Top of Form

Bottom of Form

Introduction & Background

This paper seeks to build a framework for how cities can engage in revitalization efforts and meet the challenges before them, while ensuring that all citizens have access to and can benefit from the amenities in the city, and that they feel engaged and empowered to contribute to the life of the city themselves. While there are large literatures in public policy and urban planning addressing city revitalization efforts (e.g., Guimarães, 2021; Pelorosso, 2020; Ryberg-Webster & Kinahan, 2014), and some cities are beginning to implement solutions, there is still much work to be done to ensure residents are all adequately served and to clearly delineate the important role each organization or actor in the marketplace can play (Arsel et al., 2021). We take a unique mixed-methods approach to the problem. In addition to two secondary data studies (one using survey data of residents' evaluations of their living environments and one analyzing Twitter data), we also present a qualitative study incorporating primary interviews with people from a wide variety of organizations working to improve cities.

Key Findings

The CARE framework aims to inform and engage marketplace actors in new thinking and action of designing and revitalizing cities. We propose the need for integrated and comprehensive approaches in close partnership with marketplace actors to address the city's greatest challenges and reduce inequality gaps.

First, cities can concentrate on *smart revitalization* by assimilating all voices to ensure shared growth, smart progress, and high quality of life and welfare for all residents; by forging new relations and cooperation across diverse marketplace actors to reduce gaps. For example, when K-12 schools nationwide moved online in the spring of 2020, it exposed the digital divide across many families lacking broadband at home. Cities across the US initiated numerous policies, partnering with various marketplace actors particularly those in industry, to reduce academic achievement gaps for low-income families (such as, Internet for All, initiative by Washington, D.C.; PHLConnectED, initiative by Philadelphia; Learning Hubs, initiated by San Francisco).

Second, cities can play an instrumental role by investing in innovative opportunities to tackle clean environmental issues and promoting integrated industrial and economic policies to enable *sustainable revitalization*. For instance, in 2019, London introduced the world's first Ultra Low Emission Zone (8 square miles) to combat

climate change and to improve social justice (<https://tfl.gov.uk/modes/driving/ultra-low-emission-zone>). At the end of the first ten months since its initiation, the program helped reduce by 44% roadside nitrogen dioxide (a harmful gas to human health), with plans to encompass a much wider area by the end of 2021. Likewise, the OneNYC 2050 plan aims “to achieve an equitable, sustainable city for all New Yorkers by the year 2050, including the transformation to zero greenhouse gas emissions by mid-century” (Sustainable Development Report, 2019), and the C40 cities is a coalition of city mayors from around the world working together “to confront the climate crisis and create a future where everyone can thrive” (c40.org).

Third, cities can contribute to *inclusive revitalization* by contending poverty, crime, food insecurities, and joblessness, avoiding the segregation of minorities, and addressing the issues of equal access to all. For instance, based on effective policies/programs from other cities in the US, the Philadelphia City Council launched the Narrowing the Gap initiative in 2018 to alleviate and prevent poverty focusing on three key areas: housing, jobs and education, and social safety net (<https://phlcouncil.com/narrowing-the-gap/>).

References

- Arsel, Z., Crockett, D., & Giesler, M. (2021). Exploring the marketplace potential of transformative urban revitalization. *Journal of Consumer Research*, 48(2), 245–263. <https://doi.org/10.1093/jcr/ucab015>
- City of New York. (2019). OneNYC 2050: Building a strong and fair city. <https://onenyc.cityofnewyork.us/>
- C40 Cities. (n.d.). About C40. <https://www.c40.org/about-c40/>
- City of Philadelphia. (n.d.). PHLConnectED. <https://www.phila.gov/programs/phlconnected/>
- City and County of San Francisco. (2020). Learning Hubs initiative. <https://sf.gov/information/learning-hubs>
- District of Columbia Office of the Chief Technology Officer. (n.d.). Internet for All DC. <https://octo.dc.gov/page/internetforall>
- Guimarães, P. (2021). Urban regeneration, community development, and the search for inclusion. *Cities*, 113, 103134. <https://doi.org/10.1016/j.cities.2021.103134>
- Pelorusso, R. (2020). Inclusive urban regeneration for post-pandemic cities: Policy suggestions for a new normal. *Sustainability*, 12(24), 10571. <https://doi.org/10.3390/su122410571>
- Philadelphia City Council. (2018). Narrowing the Gap initiative. <https://phlcouncil.com/narrowing-the-gap/>
- Ryberg-Webster, S., & Kinahan, K. L. (2014). Historic preservation and urban revitalization in the twenty-first century. *Journal of Planning Literature*, 29(2), 119–139. <https://doi.org/10.1177/0885412213510520>
- Sustainable Development Solutions Network. (2019). Sustainable development report 2019: Transformations to achieve the SDGs. Cambridge University Press. https://s3.amazonaws.com/sustainabledevelopmentreport/2019/2019_sustainable_development_report.pdf
- Transport for London. (n.d.). Ultra Low Emission Zone (ULEZ). <https://tfl.gov.uk/modes/driving/ultra-low-emission-zone>

Summary Brief

Mapping the Digital Transformation of Higher Education: A Review and Research Agenda

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Abstract

This research explores the impact of digital transformation (DT) in higher education (HE). We conducted a systematic literature review entailing 552 articles published in the field from 2012-2024. The analysis identifies the evolution of digital transformation in higher education. Although a higher education's digital maturity is linked to the scope of its digital transformation efforts, the analysis of the impact of DT in HE remains under-researched. The review highlights two critical avenues for future research: (i) the managerial perspective, focusing on the development of models that capture the scope and implications of DT in HE management; and, (ii) the learner experience, examining how digital environments enable mechanisms of value co-creation within the service ecosystem.

Keywords: Digital Transformation, Higher Education, Co-Creation, Learner Experience; Bibliometric Research

Introduction

Digital transformation (DT) has become essential to organizational change across various industries, including higher education (HE). It is characterized by integrating digital technologies into all facets of an institution's operations, fundamentally reshaping processes, culture, and strategies. DT in higher education has emerged as a critical factor in ensuring institutional competitiveness, operational efficiency, and the delivery of high-quality educational services. This transformation impacts how institutions manage administrative tasks and influence how education is delivered, experienced, and perceived by learners.

In recent years, higher education institutions (HEIs) have been increasingly adopting digital tools and strategies to remain relevant and competitive in an era marked by rapid technological advancements. The adoption of these tools is motivated by the need to enhance administrative efficiency, improve the learner experience, and provide more personalized, flexible learning opportunities. As technologies such as artificial intelligence (AI), big data, and machine learning evolve, HEIs leverage these advancements to optimize administrative processes, improve decision-making, and create more engaging learning environments (Mergel et al., 2019).

This study aims to address the current state of digital transformation in higher education, focusing on two primary dimensions: (1) digital management and (2) the learner experience arising from technological absorption. By conducting a systematic literature review, this research seeks to provide an understanding of how digital tools have reshaped both administrative processes and education approaches in HEIs. Moreover, this study identifies key trends, challenges, and gaps in the literature that need further exploration, particularly the long-term impact of DT on institutional management and learner-learning outcomes and value co-creation.

Background

DT plays a pivotal role in higher education management. Institutions now use digital tools to streamline operations, manage learner data more efficiently, and improve communication between faculty, learners, and administrators. From learner enrolment to course management, digital platforms have made it easier for HEIs to manage the complexities of modern educational systems. As a result, institutions that embrace DT are better equipped to meet the growing demands for operational transparency, efficiency, and agility (Bond et al., 2018).

The COVID-19 pandemic was a major catalyst for digital transformation in higher education. The sudden shift to remote and online learning forced institutions worldwide to adopt digital tools at an unprecedented pace. During this period, they highlighted the importance of digital readiness and the ability of HEIs to adapt to external disruptions. As educational institutions transitioned from in-person to virtual environments, the demand for reliable digital infrastructure, innovative teaching methods, and flexible learning environments grew exponentially. The

pandemic revealed the potential of DT in sustaining educational continuity and the challenges associated with ensuring equitable access to these digital tools (García-Peñalvo & Corell, 2020).

One of the most significant effects of DT in HE is its impact on the learner experience. Today's learners are digital natives, accustomed to real-time information, flexible access to resources, and personalized content. Digital transformation in HEIs has enabled a shift from traditional, one-size-fits-all teaching models to more student-centered, personalized learning environments. Digital platforms, such as learning management systems (LMS) and adaptive learning technologies, allow institutions to engage in the learning experience, providing data-driven insights that inform instructors and students about progress and areas for improvement (Cardoso et al., 2017).

Research Methods

A bibliometric analysis was conducted to explore trends in DT research within HE. This review utilizes data from 552 articles published between 2012 and 2024, sourced from databases like Web of Science and Scopus. The Biblioshiny R package was employed to analyze keyword co-occurrence, thematic maps, and citation patterns (Castañeda et al., 2022). The review synthesizes trends and offers insights into emerging areas for further investigation (Angarita et al., 2022).

Findings

Publications' Overview

Over the period 2012 and 2023, the annual growth rate of publications reached an impressive 59.92%, reflecting a rapidly expanding interest in DT in HE. The review highlights two periods in publication trends: a slower growth phase from 2012 to 2018 and a rapid increase from 2019 onwards. The period after 2019, particularly during the COVID-19 pandemic, saw a significant surge in related research, emphasizing the field's growing relevance. The number of publications rose dramatically, especially in response to the COVID-19 pandemic, which necessitated swift adaptation to online learning and digital solutions in HE (García-Peñalvo & Corell, 2020a; 2020b).

Countries leading the research in DT include Spain, Russia, and Portugal. The heightened focus on HE institutions' digital transformation, particularly during the pandemic, indicates a growing global consensus on the importance of digital technologies in sustaining and advancing education (Sánchez-Caballé & Esteve-Mon, 2023).

Digital Transformation and Higher Education Management

Digital transformation has streamlined higher education management by improving operational efficiency through digital platforms. These platforms have optimized everything from course management to student services, allowing institutions to offer real-time digital solutions that meet the expectations of modern learners (Cardoso et al., 2017).

Essential tools like the Learning Scorecard (LS) integrate data from e-learning platforms and academic systems, providing a comprehensive view of learner progress, motivation, and engagement. However, the literature indicates that further research is needed to fully understand the long-term effects of these tools on management practices and their broader impact on institutional effectiveness (Shenkoya & Kim, 2023).

Learner Experience in the Digital Age

The learner experience is central to the transformation occurring within HE. Digital tools have redefined how learners engage with content, their instructors, and each other. Research indicates that learners now expect real-time digital services and flexible, personalized learning experiences (Tondeur et al., 2023).

Digital transformation has not only changed the way we teach but also empowered learners to become co-creators of their learning journey. Value co-creation emerges through the integration of resources (e.g., knowledge and skills), among various actors within service ecosystems. Value-in-use captures the idea that value is derived from the application and integration of resources in specific contexts (Vargo and Lusch, 2016). Transposing this idea to HE, the concept of value co-creation between learners and institutions has gained prominence, with digital tools enabling more interactive, tailored experiences that respond to individual needs (Kaasinen & Yoon, 2013).

Key trends

Digital maturity. Institutions that have achieved higher levels of digital maturity—those that have effectively integrated advanced technologies into their operations—demonstrate a more comprehensive transformation (Ganga-Contreras et al., 2024). However, many institutions remain in the early stages of digital adoption, and there is significant variation in how deeply DT is embedded in administrative and pedagogical practices (Gkrimpizi et al., 2024).

Emerging Technologies. Artificial Intelligence (AI), data analytics, and adaptive learning technologies are emerging as significant drivers of DT in HE. These technologies offer the potential to further personalize education, providing the learner with learning experiences that adapt to their progress and needs (Mhlanga, 2020). The increasing use of AI in administrative processes also promises to enhance institutional efficiency (Dwivedi et al., 2023).

Post-pandemic Adaptations. The pandemic has accelerated the adoption of digital technologies in higher education. Institutions were forced to quickly implement online learning platforms and digital services to continue operations during lockdowns. This period of rapid innovation has left lasting changes in higher education, with many institutions now planning to expand their use of digital tools in the long term (García-Peñalvo et al., 2020).

Conclusion and Future Directions

Digital transformation is fundamentally reshaping HE, influencing both institutional management practices and the learner experience. This study highlights two critical avenues for future research: (i) the managerial perspective, focusing on the development of models that capture the scope and implications of DT in HE management; and, (ii) the learner experience, examining how digital environments enable mechanisms of value co-creation.

To remain competitive, HE institutions must invest in robust digital infrastructure and adopt innovative pedagogical approaches that leverage emerging technologies. The rapid pace of technological change means that institutions must continuously adapt to new developments in technology and pedagogy, making long-term planning more complex. As digital tools evolve, so too must institutional strategies to address the changing expectations of learners (Abad-Segura et al., 2020) and other stakeholders. These challenges underscore the need for a more strategic and comprehensive approach to digital transformation in HE (Gkrimpizi et al., 2024). Further inquiry is needed into the long-term effects of DT on educational outcomes, engagement, and satisfaction. In parallel, institutions must consider how to balance technological adoption with the development of digital competencies among both students and educators, ensuring that the benefits of transformation are fully realized (Bond et al., 2018).

In particular, more in-depth research is needed on how DT influences learning outcomes, engagement, and overall satisfaction. The balance between technological adoption and the development of digital competencies among learner and educators is an area open for exploration (Mergel et al., 2019). Future research should also examine the dynamics of value co-creation within the HE service ecosystem, moving beyond dyadic interactions to consider the complex network of relationships among students, educators, administrators, technology providers, policymakers, and industry partners. At this ecosystem level, digital transformation enables new forms of connectivity, resource integration, and collaborative knowledge creation that extend across institutional and sectoral boundaries. Investigating how these diverse service actors interact—through both formal structures (e.g., curricula, institutional partnerships) and informal networks (e.g., peer learning communities, social platforms)—can reveal mechanisms that drive innovation in pedagogy, enhance learner engagement, and generate mutual value. Such a perspective aligns with service-dominant logic, emphasizing that value is not created by institutions alone but co-created through ongoing exchanges within an interconnected, technology-mediated environment (Vargo et al., 2023).

References

- Abad-Segura, E., González-Zamar, M.-D., Infante-Moro, J. C., & García, G. R. (2020). Sustainable Management of Digital Transformation in Higher Education: Global Research Trends. <https://doi.org/10.3390/su12052107>
- Angarita, L. B., Del Carpio, A. F., & Londoño, A. A. O. (2022). A Bibliometric Analysis of DevOps Metrics. *DESIDOC Journal of Library and Information Technology*, 42(6), 387–396.

- Bond, M., Marín, V. I., Dolch, C., Bedenlier, S., & Zawacki-Richter, O. (2018). Digital transformation in German higher education: student and teacher perceptions and usage of digital media. *International Journal of Educational Technology in Higher Education*, 15(1).
- Cardoso, E., Costa, D., & Santos, D. (2017). Introducing the Learning Scorecard: a tool to improve the student learning experience.
- Castañeda, K., Sánchez, O., Herrera, R. F., & Mejía, G. (2022). Highway Planning Trends: A Bibliometric Analysis. In *Sustainability* (Vol. 14, Issue 9).
- García-Peñalvo, F. J., & Corell, A. (2020a). La COVID-19: ¿enzima de la transformación digital de la docencia o reflejo de una crisis metodológica y competencial en la educación superior? In *Campus Virtuales* (Vol. 9, Issue 2). www.revistacampusvirtuales.es
- García-Peñalvo, F. J., & Corell, A. (2020b). The COVID-19: the enzyme of the digital transformation of teaching or the reflection of a methodological and competence crisis in higher education? In *Campus Virtuales* (Vol. 9, Issue 2). www.revistacampusvirtuales.es
- García-Peñalvo, F. J., Corell, A., Abella-García, V., & Grande, M. (2020). Online assessment in higher education in the time of COVID-19. *Education in the Knowledge Society*, 21.
- Gkrimpizi, T., Peristeras, V., & Magnisalis, I. (2024). Defining the Meaning and Scope of Digital Transformation in Higher Education Institutions. *Administrative Sciences*, 14(3).
- Kaasinen, A. , & Y. Y. I. (2013). Service engagement model for mobile advertising based on user behavior. *International Conference on Information Networking*, 131–134.
- Mergel, I., Edelmann, N., & Haug, N. (2019). Defining digital transformation: Results from expert interviews. *Government Information Quarterly*, 36(4).
- Mhlanga, D. (2023). Digital Transformation in Education: Relevant Paradigms and Theories of Teaching and Learning in the Industry 4.0. In C. Kahraman & E. Haktanır (Eds.), *Intelligent Systems in Digital Transformation. Lecture Notes in Networks and Systems* (Vol. 549, 6–19).
- Sánchez-Caballé, A., & Esteve-Mon, F. M. (2023). Analysis of Teaching Methodologies Using Digital Technologies in Higher Education: a Systematic Review. *RIED-Revista Iberoamericana de Educacion a Distancia*, 26(1), 181–199.
- Shenkoya, T., & Kim, E. (2023). Sustainability in Higher Education: Digital Transformation of the Fourth Industrial Revolution and Its Impact on Open Knowledge. *Sustainability (Switzerland)*, 15(3). <https://doi.org/10.3390/su15032473>
- Tondeur, J., Howard, S., Van Zanten, M., Gorissen, P., Van der Neut, I., Uerz, D., & Kral, M. (2023). The HeDiCom framework: Higher Education teachers' digital competencies for the future. *Educational Technology Research and Development*, 71(1), 33–53.
- Vargo, Stephen L., and Robert F. Lusch (2016), "Institutions and Axioms: An Extension and Update of Service-Dominant Logic," *Journal of the Academy of Marketing Science*, 44 (1), 5-23.
- Vargo, Stephen L, Linda Peters, Hans Kjellberg, Kaisa Koskela-Huotari, Suvi Nenonen, Francesco Polese, Debora Sarno, and Claudia Vaughan (2023), "Emergence in Marketing: An Institutional and Ecosystem Framework," *Journal of the Academy of marketing Science*, 51 (1), 2-22.

Full Paper

Ethical Consequences of Consumer Incivility During Online Service Recovery: A Conceptual Framework Using a Multi-Theoretical Ethics Synthesis

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This conceptual paper examines the ethical responsibilities of brands in moderating consumer-to-consumer incivility during online service recovery. Drawing on a theory synthesis of Kantian deontological ethics, neo-Aristotelian virtue ethics, and care ethics, we propose a framework linking brand intervention to moral duty, moral courage, community nurturance, and ethical legitimacy. We argue that intervening -- particularly when the target of incivility is vulnerable -- signals principled obligation and character-based strength, fostering a respectful, safe digital environment. Conversely, brand silence represents an abdication of ethical responsibility, undermining stakeholder trust. Our model positions community nurturance as the mechanism translating ethical motives into legitimacy, reframing service recovery as relational stewardship rather than transactional resolution. This approach advances service recovery theory and offers guidance for managers to embed ethical frameworks into social media moderation practices.

Introduction

A company-hosted social media community, hereafter referred to as a brand's digital space, enables consumer interactions with firms that are valuable opportunities for brands (Appel et al. 2020). Yet, one negative aspect of a brand's digital space is a growing trend of incivility. As evidence, Microsoft's digital civility study shows various forms of online uncivil behavior have increased over the last few years worldwide (Microsoft 2024). Indeed, online incivility is rampant due to relaxing social norms of appropriate behavior that are present in face-to-face discussions (Shmargad et al. 2022; Suler 2004). For marketers, online incivility affects several aspects of business (Dineva 2023). Our work uses a specific context relevant to services marketing: Consumers responding rudely to others who post complaints to brands when seeking a service recovery online.

Recent work notes that this context represents a metaphorical perfect storm for incivility and the question of how or if brands should address it (Bacile et al. 2025; Dineva et al. 2025; Huang and Ha 2024). For clarity, this perfect storm includes 'Consumer A' (the complainant) suffering a service failure, who may be upset, stressed, and in a vulnerable (i.e., weakened) state when asking a brand for help via social media; and 'Consumer B' (an uncivil attacker), who responds to this weakened state by targeting 'Consumer A' with mockery, insults, aggression, or bullying messages. Collectively, such remarks fall under the umbrella term of incivility. Due to this occurring in a brand's digital space, the brand is watching/responding in the message thread because the initial complaint started a service recovery opportunity. In addition, due to the visibility of the social media posts, observers (i.e., other consumers who are not 'Consumer A' or 'Consumer B') can watch and evaluate the dialogue.

To date, research of consumer online incivility in this service recovery context examines exchange-based perceived justice, experiential value, amusement, engagement, purchase intent, and how firms address incivility (Bacile et al. 2018; Bacile 2020; Bacile et al. 2020; Béal et al. 2023; Dineva et al. 2025; Huang and Ha 2024; Labrecque et al. 2022; Wolter et al. 2023). In addition, one recent work introduced the moral emotion of sympathy using a consumer incivility lens (Bacile et al. 2025), however it did not dive deeply into theoretical perspectives of morality or ethics. Yet, the study of a morality-related construct illustrates how an ethical theoretical perspective may be relevant to this research area, despite no prior works using a central focus of ethics and related ethical theories as frameworks to help explain the effects of consumer online incivility. The application of ethical theories to explain these relationships answers prior calls to study negative events in multi-actor recovery situations (Grégoire and Mattila, 2021; Khamitov et al., 2020) and online consumer incivility (Lages et al., 2023). Thus, the ethical nature of a brand's responsibility in moderating uncivil behavior among consumers during online service recovery has not been studied, yet is warranted.

The purpose of this research is to employ several ethical theories to explain how and why brands, though not the source of incivility, may be morally implicated regarding the manner in which they moderate interactions within their digital spaces. The authors use the theory synthesis approach (Jaakkola 2020) to conceptualize how three ethical theories support a morality viewpoint. From a Kantian deontological perspective, a brand has a moral duty within its digital space to protect customers' dignity and maintain their respectful treatment, regardless of potential business consequences. From a neo-Aristotelian virtue ethics perspective, brands require moral courage to act ethically despite the possibility of reputational risk, customer backlash, or perceived bias. From a care ethics perspective, brands are called to demonstrate community nurturance to sustain a safe, respectful, and supportive online environment for all stakeholders. These perspectives are not mutually exclusive; rather, they are mutually reinforcing. Our conceptualized framework posits that a brand's intervention in an instance of consumer online incivility within its digital space is a display of moral duty and moral courage motivations, each of which becomes more important based on the perceived vulnerability of the customer targeted by incivility. The motivation of a principle-bound obligation via moral duty and a character-based strength via moral courage contributes to a relationship-centered evaluation of community nurturance. When these ethical drivers and behaviors align, they contribute to stakeholders' perceptions of ethical legitimacy.

The remainder of our work begins with a literature review that notes a lack of an ethical perspective in offline and online service recovery in our context of consumer online incivility. The conceptual model is then developed with propositions based on support from our theory synthesis. Our work concludes with implications, limitations, and future research opportunities.

Literature Review

An overarching theory in many service recovery works is justice theory. The word 'justice' on its face may convey a sense of morality and ethics. However, justice theory has two broad perspectives that vary in the application of a morality worldview. To clarify these two different types of justice, Rawls' Theory of Justice (1971) focuses on the establishment of a just society based on equal basic liberties, equal opportunity, and benefits for the most vulnerable by adhering to societal moral obligations. This moral obligation outlook of justice contrasts with an equity theory perspective (Adams 1965) within behavioral and social psychology, involving equality in a fair exchange. The latter of these two theories is where justice is used to explain service recovery as an exchange-based fairness evaluation framework, which underrepresents its ethical origins.

'Justice' as it applies to service recovery focuses on the reciprocal nature of customer-firm interactions and the fairness of an equitable balance of inputs and outcomes. This exchange-based focus on customers' perceptions of fairness in outcomes, processes, and interpersonal interactions following service failures differs from ethical and moral principles underlying justice. Yet, seminal works began a long-standing incorporation of justice with equity theory's exchanged-based view (Blodgett et al. 1993; Blodgett et al. 1997; Mattila 2001; Tax et al. 1998). Hence, service recovery research's reliance on this exchange-oriented application of justice theory highlights a gap where an ethical perspective of justice/fairness is underexplored.

Another aspect that is relevant to the current work is dyadic versus polyadic service recovery (i.e., involving more than two individuals). Most prior service recovery research examines the consequences of service failures and complaint handling through a dyadic lens (Grégoire et al. 2025). To elaborate, traditional dyadic service encounters involve a complaining customer and a service rep without other consumers participating. This dyadic perspective focuses on the subsequent "sequence of events in which a procedure, beginning with communicating the complaint, generates a process of interaction through which a decision and outcome occurs," (Tax et al. 1998, p. 61). In such a scenario, a firm's service employees want to maintain the customer relationship and uphold the brand's reputation when attempting to correct a prior failure without recognizing other parties outside of the dyad (Miller et al. 2000; Van Vaerenbergh et al. 2019). Unfortunately, research "remains rooted in traditional paradigms, focusing on dyadic interactions between firms and complainers," (Grégoire et al. 2025, p. 1), which hinders newer challenges in modern day service recovery (Van Vaerenbergh et al. 2019). For instance, brands typically focus on a dyadic response to an online complaint, but remain silent (i.e., passively ignore) consumer online incivility within the same message thread (Bacile et al. 2025).

We now see a shift to polyadic service recovery when consumers complain on a brand's digital space. This shift away from dyadic recovery encounters is due to virtually present others who can watch or participate via social media (Johnen and Schnittka 2019; Schaefer and Schamari 2016). These virtually present others are additional

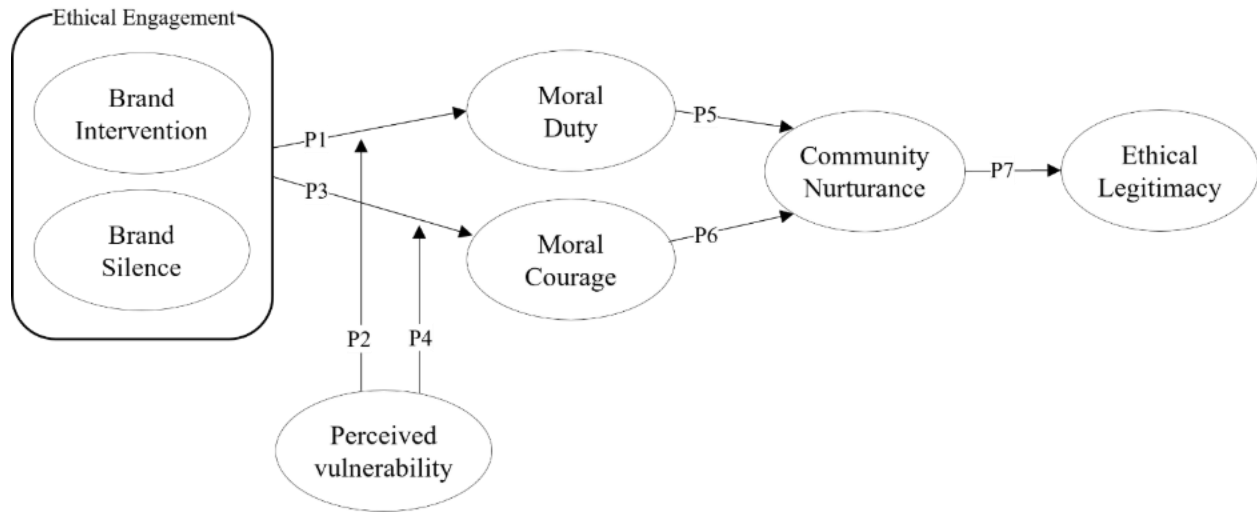
stakeholders (Hogreve et al. 2019) who have not been applicable or studied in most dyadic recovery works. This means that existing research and frameworks may not seamlessly explain complaint handling and social interactions by additional stakeholders on brands' digital spaces. Recent works have taken notice and are studying many nuances of "a polyadic perspective of service recovery," (Bacile et al. 2018, p. 76). For example, online complaints and recoveries introduce different types of consumer behavior and situational factors such as consumer online incivility (Bacile et al. 2020).

The presence of multiple consumers in a brand's digital space introduces a social-servicescape dynamic where the brand is expected to act as a moderator of certain social interactions and behaviors between consumers (Dineva et al. 2025). Service research has investigated incivility during online service recovery from the aforementioned exchange-based perspective, yet not with a central focus of ethics. Rather, prior works examine exchange-based perceived justice, experiential value, engagement, purchase intent, and how firms address incivility (Bacile et al. 2018; Bacile 2020; Bacile et al. 2020; Bacile et al. 2025; Béal et al. 2023; Dineva et al. 2025; Wolter et al. 2023). One exception is a study that incorporated the moral emotion of sympathy (Bacile et al. 2025), albeit in an exchange-based perspective without a central focus on morality or ethical theories. Taken altogether, these online incivility works that do not focus on ethics is surprising owing to incivility work in other fields like nursing and workplaces, or other marketing contexts such as employee incivility in front of consumers that have applied an ethical lens to incivility (e.g., Blackler et al. 2022; Dartey-Baah et al. 2024; Porath et al. 2011). Consequently, ethical theories and the ethical nature of a brand's responsibility in moderating consumer online incivility has not been a central focus or addressed in depth in prior online service recovery investigations. The following conceptualizations address this ethics void by adapting deontological ethics, virtue ethics, and care ethics to the area of consumer online incivility.

Conceptual Framework and Propositions

Figure 1's conceptual model adapts an integrative ethical framework for understanding how a brand addresses consumer online incivility. The framework draws from three distinct, yet complementary traditions in moral philosophy: Kantian deontology, neo-Aristotelian virtue ethics, and care ethics. This multi-theoretical approach is what Jaakkola (2020) and others refer to as theory synthesis, which is a powerful approach to theory building. Each tradition contributes a unique lens for evaluating brand intervention to address uncivil remarks occurring on a brand's social media channel during online service recovery encounters. Table 1 presents the definitions for each construct and clarifies their roles in Figure 1's conceptual framework.

Figure 1: Conceptual Model



The conceptual framework proposed here follows a clear theoretical chain. A brand's decision to intervene in instances of consumer online incivility represents the initiating act that signals ethical engagement. This intervention can be interpreted through the motivation of two complementary ethical lenses: deontological ethics, emphasizing the brand's moral duty to uphold universal moral principles; and virtue ethics, highlighting the moral courage required to act despite potential risks or backlash. These ethical orientations, while distinct in foundation, converge in their influence on community nurturance, which we derive from care ethics. In turn, consistent community nurturance strengthens ethical legitimacy, whereby stakeholders perceive the brand as morally trustworthy, principled, and aligned with widely accepted moral norms. By articulating this sequential pathway, the framework connects theory to practice, illustrating how discrete ethical constructs interlock to produce meaningful stakeholder outcomes. The next sections apply each of the three theories to consumer online incivility during social media service recovery.

Table 1: Construct Definitions

Construct	Definition
Brand Intervention	A brand's deliberate decision to address customer-to-customer online incivility on its social media channel, such as by calling out uncivil remarks, asking for respectful behavior, or otherwise moderating the interaction.
Brand Silence	A brand's deliberate decision to not address consumer online incivility on its social media channel. This often occurs when a brand responds to an initial complaint, but passively ignores incivility in the same thread. As such, brand silence is a brand failing to intervene (i.e., a lack of intervention) in incivility.
Moral Duty	An obligation, grounded in deontological ethics, for a brand to act in accordance with universal moral principles (e.g., maintaining respect, dignity, etc.) regardless of the consequences. Moral duty reflects the <i>principle-bound requirement</i> to protect and uphold these standards, even in the absence of tangible rewards.
Moral Courage	A willingness, grounded in virtue ethics, for a brand to take ethically-right action in the face of risk, backlash, or loss. Moral courage reflects <i>character-based strength</i> to confront incivility despite uncertainty or possible harm to the brand.

Perceived Vulnerability	Extent to which a target of incivility is viewed as being in a weak/disadvantaged position, such as due to emotional distress, peer scrutiny, reputational risk, social exposure, or other situational factors, making them more susceptible to harm from uncivil remarks.
Community Nurturance	The brand's active effort, grounded in care ethics, to foster and maintain a respectful, safe, and supportive environment within its digital spaces. Community nurturance reflects the <i>relationship-centered commitment</i> to protect and strengthen the well-being of all community members, even when such efforts may require sustained attention and resources.
Ethical Legitimacy	Stakeholders' perception that the brand's actions are morally appropriate, consistent with widely accepted moral norms, and reflective of a trustworthy and principled organizational character.

Deontological Ethics: Moral Duty

Kantian deontology (Kant 1997), hereafter referred to as deontological ethics, is rooted in the work of Immanuel Kant, a German philosopher writing in the 18th Century. Kant's work exerts a significant impact on moral and political philosophy, applied ethics, and, more broadly, contemporary discussions of morality. Two fundamental ethical principles articulated by Kant are the Formula of Universal Law and the Formula of Humanity (Kant 1997). While Kant argued that these principles are equivalent, they have different emphases (Nyholm 2015). The former highlights the importance of general or universalizable norms and the latter emphasizes the importance of respecting persons as autonomous individuals capable of making their own decisions.

It is well researched under an exchange-based perspective that brands have a duty to correct service failures by enacting proper employee-customer dyadic treatment, fair policies and rules, and providing equitable compensation during service recovery (e.g., Tax et al. 1998; Van Vaerenbergh et al. 2018). In doing so, this duty to resolve a service failure is a means to an end because a brand benefits by increasing customer satisfaction, future purchase intent, loyalty, and other positive outcomes (Gelbrich and Roschk 2011). Yet, adapting the lens of deontological ethics suggests that organizations have a moral duty to uphold universal moral principles, such as ensuring the fair treatment of individuals with respect and dignity. Deontological ethics emphasizes that all rational beings possess inherent dignity and must be treated as ends in themselves, yet never as means to an end (Kant 1997). This foundation gives rise to a universal moral duty to safeguard another's dignity and respect. From the standpoint of deontological ethics, a brand's moral duty is not contingent upon a commercial exchange that benefits a firm (Kant 1997). Rather, a brand has a principle-bound requirement of moral duty to address consumer incivility regardless of whether an intervention is financially beneficial for a brand. Stakeholders, including both a target of incivility and observers of incivility, are likely to perceive the brand has a moral duty to, at minimum, intervene by addressing the comments, such as asking a rude commenter to refrain from such behavior or apologizing to the target for being mistreated.

However, brands often choose non-intervention by using the neutrality route (i.e., responding to the complainant's service failure issue, but not acknowledging the incivility; Bacile et al. 2025). We submit this is brand silence, rather than brand intervention. A key point here is a difference between non-action due to an unawareness of an event versus intended inaction by omitting a response to an event that a person or entity is aware of (Schwenkenbecher 2022). The context of a service recovery opportunity in a channel managed by a brand and often supported with human service reps or technology tools (i.e., algorithmic natural language processing tools that flag posts with specific content) is a situation where a brand is present and is perceived to be accountable to address the content of conversations (Bacile et al. 2018). Therefore, a lack of brand intervention is likely to be viewed as a brand failing to fulfill its moral duty by failing to address the incivility, which is a dereliction of moral duty.

P1: Brand intervention (silence) in response to consumer online incivility fulfills (neglects) a brand's principle-bound obligation of moral duty.

A brand's moral duty in the given context is likely to be heightened due to the need to protect a more vulnerable individual. Deontological ethics maintains that the more vulnerable an individual is, the stronger the moral duty to protect their dignity, autonomy, and well-being (Kant 1997). A customer who publicly complains about a service failure is in a heightened vulnerable state because they are likely to be upset, disappointed, and emotional due to the failure, which may make them more sensitive to interpersonal harm (Cénopht et al. 2024). They are also taking a risk of social invalidation of peer scrutiny by publicly posting their problem (Varnali and Çeşmecı 2022). Furthermore, a complainant is in a power-imbalanced position relative to the brand (which has authority to correct a problem) and other customers (who may criticize, belittle, insult, or shame them in public view) (Baker et al. 2005). Additionally, there are other possible factors that could increase vulnerability, including if one or more uncivil consumers continually attack a target (i.e., a spiral of increased aggressive behaviors; Andersson and Pearson 1999), if a target is perceived to suffer a large loss, if attacks involve comments regarding sensitive personal issues and beliefs such as sexual orientation, gender specific topics, political beliefs, lifestyle choices, or other polarizing issues. Taken altogether, the perceived vulnerability of the complainant due to a prior service failure, emotional strain, social exposure, and other vulnerability factors amplify the ethical stakes of moral duty.

P2: The positive (negative) effect of brand intervention (silence) on perceptions of moral duty fulfillment is stronger when a target of incivility is perceived to be highly vulnerable (e.g., more emotionally distressed or publicly exposed).

Virtue Ethics: Moral Courage

Neo-Aristotelian virtue ethics (Foot 1985; McDowell 1979), hereafter referred to as virtue ethics, represents a second approach that complements insights drawn from deontological ethics when considering the problem of online incivility. Drawing inspiration from the work of Aristotle (2019), whose *Nicomachean Ethics*, which has for over 2,000 years been a central text in moral philosophy, virtue ethics focuses on identifying a range of virtues that are needed to live well or flourish. Virtues are character-based traits that dispose those who possess them to act well by exemplifying them in their actions. An honest person, for example, shows her honesty by acting in accordance with this virtue in situations that require it. Virtue ethics theory includes moral virtues such as honesty, benevolence, and courage to signify character-based strength (Solomon 1992).

Our application of virtue ethics theory enables the incorporation of the virtue moral courage for a brand in the context of consumer online incivility. Moral courage is a virtue focused on a willingness to take ethically-right action in the face of risk, backlash, loss, or uncertainty in order to accomplish good things (Putnam 1997). For service recovery situations that include consumer online incivility in a brand's digital space, the lens of moral courage shifts the focus beyond exchange-based fairness, rule-based actions, or outcome-based reasoning for why a brand should respond to incivility. Our theoretical implementation of moral courage enables a brand to exhibit what kind of character it enacts in its digital spaces. Yet, failing to intervene with brand silence (i.e., neutrality by failing to address online incivility) may be viewed as a lack of moral courage akin to a moral failure. The implication of applying a lens of moral courage for a brand becomes ethical risk-taking. The risks or dangers for a brand to address consumer online incivility during service recovery are: 1) the brand being seen as biased in dispute resolution; 2) the brand escalating a publicly viewable uncivil argument; or 3) a brand losing customers on either side of the conflict. Therefore, our virtue ethics application reframes brand intervention as a display of moral courage and reframes brand silence as a lack of moral courage rather than a service provider's neutral stance.

P3: Brand intervention (silence) in response to consumer online incivility is a display (lack) of a brand's character-based strength of visible moral courage.

In addition, the display or lack of moral courage is likely to be more pronounced for a target of incivility who is perceived as more vulnerable. When someone is more highly vulnerable, a brand intervening into that space increases potential reputational and relational risks, which underscores a deeper level of character-strength moral courage (Kristjánsson 2025). For instance, a thread that includes ten uncivil consumers versus a thread with one uncivil consumer increases a target's vulnerability and requires a brand to speak out against a larger number of viewpoints. Another example is an uncivil responder speaking about a sensitive issue, such as a political stance. A brand reprimanding such a commenter may be perceived by some stakeholders as a brand disagreeing with the political stance, which thereby increases a brand's reputational and relational risks with those who disagree with the brand. These examples illustrate that it may take more moral courage for a brand to speak out as a target's vulnerability increases.

- P4: The positive (negative) effect of brand intervention (silence) on perceptions of moral courage is stronger when a target of incivility is perceived to be highly vulnerable (e.g., more emotionally distressed or publicly exposed).

Care Ethics: Community Nurturance

Care Ethics contrasts with deontological ethics and with virtue ethics by focusing on the central importance of a relational-centered commitment instead of universal moral principles (Gilligan 1993; Noddings 1984). Rather than prioritizing universal rules and duties (as in deontological ethics) or the cultivation of moral character traits (as in virtue ethics), care ethics emphasizes the moral significance of relational responsibility, empathy, attentiveness to others' needs, and the quality of relationships (Held 2006; Tronto 2020). At its foundation, the theory maintains that moral agents are embedded in webs of social relationships, and ethical action emerges from understanding, valuing, and sustaining these relationships (Hawk 2011; Pettersen 2011). It underscores moral worth is demonstrated not merely by following abstract norms or developing virtuous traits, but by actively fostering the well-being of others in specific, often asymmetrical, social contexts.

Drawing from the tenets of care ethics, we conceptualize the construct of community nurturance in brands' digital spaces where consumer incivility occurs. While community nurturance is not an established, named construct in the care ethics literature, we introduce it here as a novel, theoretically grounded concept that extends care ethics into the context of online service recovery and incivility. Most applications of care ethics focus on interpersonal care at the dyadic or small-group level, yet scholars have increasingly examined how care can be institutionalized through organizational care with the design of systems, norms, and climates that enable caring relations to flourish across broader communities (Arnold and Ross 2023; Noddings 2015). We build on this institutional turn by conceptualizing community nurturance as a brand's active relationship-centered commitment to foster and maintain a respectful, safe, and supportive environment within its digital spaces. This conceptualization synthesizes care ethics' principles of attentiveness, empathy, and relational responsibility with recent research on organizationally embedded care. In doing so, community nurturance becomes a higher-order organizational practice that translates care ethics from interpersonal interactions into the governance of digital brand communities. Community nurturance operationalizes care ethics in the service of collective well-being: It shifts the brand's role from a passive platform provider to an active steward of the social climate.

We propose that moral duty serves as a principled-driver of community nurturance in brands' digital space (see Santori 2024). From a deontological perspective, moral duty obliges the brand to uphold universal moral principles such as respect and dignity, regardless of potential business risks. This principled obligation of duty is the reason or motivational basis for a brand to foster a safe, respectful digital space. Community nurturance is the practical expression or form that moral duty takes when implemented (i.e., it is how duty is made visible and sustained). In other words, moral duty is the 'why' for an ethical obligation and community nurturance is the 'how' of an organizational practice. A brand's principled obligation of moral duty is made tangible to stakeholders through a brand's ongoing cultivation of a safe, respectful community. This translates an abstract ethical commitment into concrete, visible practices that sustain respectful engagement as a non-negotiable norm for all stakeholders.

- P5: A brand fulfilling its moral duty when addressing consumer online incivility will lead to stronger perceptions that the brand is actively engaging in community nurturance within its digital space.

We also propose that moral courage functions as a character-based driving force behind the development of community nurturance in brands' digital spaces (see Otteson 2024). From a virtue ethics perspective, moral courage involves taking action despite the presence of uncertainty or potential backlash. In the context of online incivility, this means more than addressing harmful interactions in the moment. It entails committing to the ongoing stewardship of a digital space, even when such actions may be unpopular or risky. Moral courage serves as the character-based motivational foundation that prompts the brand to act visibly and consistently in defense of respectful engagement, translating bravery in isolated moments into a sustained, relationship-centered environment. In this way, community nurturance becomes the practical manifestation of the brand's moral courage, making its ethical character visible to all stakeholders and reinforcing its long-term moral identity.

- P6: A brand exhibiting moral courage when addressing consumer online incivility will lead to stronger perceptions that the brand is actively engaging in community nurturance within its digital space.

The final element of Figure 1's conceptual framework is ethical legitimacy, defined as stakeholders' perception that a brand's actions are morally appropriate, consistent with widely accepted moral norms, and reflective of a trustworthy and principled organizational character (Brønn and Vidaver-Cohen 2009; Suchman 1995). In our model, community nurturance and ethical legitimacy are related, but distinct. Community nurturance is an action-oriented organizational practice grounded in care ethics. Ethical legitimacy, by contrast, is a stakeholder perception. It is an evaluative judgment about the moral appropriateness and integrity of a brand's actions (Suchman 1995). Under a care ethics lens, ethical legitimacy emerges when sustained community nurturance practices demonstrate that the brand's commitment to well-being is authentic, consistent, and integral to its identity. When stakeholders observe a brand actively stewarding the social climate by promoting civility, they are more likely to view its actions as morally grounded and socially responsible. This perception reinforces ethical legitimacy, linking the practice of community nurturance to the perception of principled organizational character.

P7: A brand exhibiting community nurturance when addressing consumer online incivility will lead to stronger perceptions that the brand is ethically legitimate.

General Discussion

Online incivility is a problem for societies worldwide (Microsoft 2024) and for marketers who use social media as complaint channels for service recovery (Bacile et al. 2018; Béal et al. 2023; Dineva et al. 2025; Huang and Ha 2024; Wolter et al. 2023). Researchers are examining many new challenges of these public service recovery channels, where dyadic interactions and civil encounters seem like a remnant of the past, at times. Much of this research examines service recovery with an exchange-based perspective from offline service recovery theory and constructs (e.g., equity theory, justice theory, satisfaction). Our work goes in a different direction by using a moral obligation outlook to broaden the understanding of online service recovery and incivility. By synthesizing deontological ethics, virtue ethics, and care ethics, we put forth a conceptual framework that highlights how addressing online consumer incivility is not simply a matter of service recovery protocol. Rather, it is a means of affirming a brand's ethical character to bolster the moral fabric of its community. The implications not only extend ethical theory into the online service recovery domain, but also provide practical guidance for brand managers seeking to uphold ethical standards that protect their customers and maintain community relations.

By integrating a brand's ethical engagement of intervention or silence, moral duty, moral courage, perceived vulnerability, community nurturance, and ethical legitimacy into a single framework, this research advances a more holistic view of brand ethics in service recovery on social media. Moral duty provides the principled foundation for upholding universal respect and dignity, while moral courage ensures that these principles are acted upon even in the face of risk or opposition. Community nurturance translates these values into a sustained, relationally focused environment where respectful discourse is actively cultivated. Together, these constructs move the discussion beyond isolated interventions toward an understanding of ethical brand conduct as an ongoing, multi-dimensional commitment. This synthesis highlights that the interplay of principled obligation, moral bravery, and relational stewardship is essential for shaping stakeholder perceptions of a brand's moral character, ultimately setting the stage for ethical legitimacy to emerge. The following implications are derived from our conceptual framework.

Theoretical Implications

Expanding on multiple ethical theories for online service recovery. The first theoretical implication is the integration of deontological ethics (by incorporating moral duty), virtue ethics (by incorporating moral courage), and care ethics (by conceptualizing community nurturance) into a single conceptual model that explains brand intervention in the context of consumer online incivility during social media service recovery. The integration of multiple theories uses what Jaakkola (2020, p. 21) describes as "theory synthesis... to achieve conceptual integration across multiple theories or literature streams." In doing so, our work moves beyond a single-lens ethical analysis to illustrate how duty-based, virtue-driven, and relational-care perspectives operate together.

Our synthesis advances each of the three ethics theories it draws upon. For deontological ethics, our work extends the application of moral duty beyond individual conduct to the brand level for service recovery, showing how duty can be institutionalized through the sustained cultivation of an ethical digital community climate. For virtue ethics, our work expands the construct of moral courage to include organizational willingness to incur reputational or relational risk in defense of vulnerable community members during service recovery, positioning courage as a driver

of long-term community stewardship. For care ethics, our work introduces community nurturance as a novel, theoretically grounded construct that operationalizes relational responsibility in the governance of incivility in a brand's digital space used for service recovery. Together, these contributions illustrate how our multi-theory synthesis generates richer, more nuanced explanations of brand behavior in online service recovery contexts, advancing ethics theory within marketing while offering practical guidance for the management of online brand communities.

Linking moral motivation to a relational outcome. Another theoretical implication is that the conceptual framework extends theory by conceptualizing and positioning community nurturance as the mechanism through which moral duty and moral courage translate into perceptions of ethical legitimacy. Prior service recovery research has typically emphasized immediate resolution outcomes with an exchange-based focus. In contrast, this study reframes brand intervention as a relational stewardship act, with long-term consequences for community relations and brand reputation. By suggesting that ethical motives can lead to sustained improvements in the climate of a brand's digital space, our model connects moral reasoning with the cultivation of healthier digital service spaces. This link underscores the importance of sustained, visible care as a driver of ethical legitimacy in brand-consumer relationships.

By introducing our conceptualization of community nurturance as a distinct, theoretically grounded construct, this work expands the boundaries of care ethics in marketing and service recovery scholarship. In particular, it frames community nurturance as a strategic and ethical outcome that materializes when brands intentionally cultivate norms of civility, mutual support, and protection for vulnerable participants in their digital spaces. This reframing emphasizes that brand intervention in the face of consumer online incivility is not only an operational decision but also a morally significant act that shapes the social fabric of brand communities. Positioning community nurturance as a bridge between ethical motivations (e.g., moral duty, moral courage) and broader perceptions of ethical legitimacy underscores its role as a pivotal mechanism for aligning service recovery practices with higher-order ethical commitments.

Reframing brand silence in ethical terms. Another implication is our work challenges the assumption that a brand's non-intervention in consumer online incivility represents neutrality. Through an integrated ethical lens, brand silence (i.e., a brand choosing not to address incivility) can be recast as an abdication of moral duty and moral courage, signaling a potential ethical failure that ultimately threatens community nurturing and ethical legitimacy. This reframing invites scholars to consider inaction as an active moral choice with tangible reputational and relational consequences in digital service environments. By positioning brand silence as ethically meaningful, the model opens avenues for research into the downstream effects of perceived moral omission in brand behavior.

Vulnerability as a contextual amplifier of moral reasoning. The inclusion of perceived vulnerability as a moderator highlights an important theoretical refinement in service recovery with an ethics viewpoint. Vulnerability is not presented merely as an attribute of certain customers (e.g., low income), but as a situational amplifier of ethical responsibility, which is especially salient in public online interactions. Customers who have suffered a service failure and are publicly seeking redress are in an emotionally and/or socially weakened position, making them more susceptible to harm from consumer online incivility. By framing vulnerability as a trigger that heightens the brand's ethical obligations, the model advances a contextualized understanding of moral decision-making in online service recovery.

Managerial Implications

Embedding ethical frameworks in social media service recovery policies. The first managerial implication is for brands to incorporate moral duty, moral courage, and care-based community nurturance principles into their official social media moderation and service recovery guidelines. This ensures consistency and transparency in decision-making when incivility arises. Embedding these ethical commitments into policies help ensure that intervention decisions are proactive, principled, and aligned with the brand's stated values. Such a policy will communicate to stakeholders that the brand's digital service recovery efforts are guided by a coherent moral framework.

Putting the policy into action with service scripts and training for duty-oriented and courageous intervention. A second managerial implication is for brands to ensure that their policies are operationalized by human service agents or A.I. chatbots. This means that brands need to prepare training and service scripts for humans and A.I. algorithms for situations where intervention for incivility is warranted. Training for humans or programming of A.I. chatbot responders need to go beyond technical response skills to include ethical reasoning and intervention courage. Such training should equip team members or A.I. algorithms to recognize when intervention is a moral necessity, even at

the risk of reputational or commercial costs. Simulated scenarios can prepare moderators to handle emotionally-charged consumer disputes in ways that protect vulnerable customers while maintaining brand integrity. Such an operationalization will communicate to stakeholders that the brand's digital service recovery efforts are guided by a moral framework that ultimately is put into action rather than reactive impulses or boilerplate policies that are not carried out when incivility occurs.

Fostering community nurturance as a strategic asset. A third managerial implication is for managers to view community nurturance not as a reactive afterthought, but as an ongoing brand responsibility. By actively cultivating respectful and prosocial norms on their platforms, brands reinforce their role as protectors of digital space well-being. Over time, this culture of nurturance can differentiate a brand from competitors by positioning it as a trusted steward of online interactions. Such differentiation has tangible benefits for customer loyalty and advocacy in competitive markets.

Maximizing the visibility of ethical actions. Lastly, the visibility of ethical interventions is as important as the interventions themselves. When brands address incivility in public, respectful, and transparent ways, both complainants and observers witness the brand's ethical commitment. This visibility strengthens perceptions of ethical legitimacy and reinforces the brand's identity as a moral actor in the marketplace. Therefore, managers should ensure that ethical actions are visibly communicated to their online audiences. Direct messages that are out of sight from the masses have benefits in some situations. However, publicly visible messages that instill ethical legitimacy to a large audience must be considered as a viable alternative in a brand's digital space.

Limitations and Future Research Opportunities

While the proposed framework offers theoretical novelty by integrating deontological ethics, virtue ethics, and care ethics into the domain of consumer online incivility during online service recovery, it is not without limitations. First, as a conceptual paper, the model's propositions remain untested and require empirical validation to establish their robustness across contexts and populations. Second, the framework assumes stakeholders perceive and interpret brand actions in relatively consistent ways, yet individual differences such as prior brand attitudes, moral reasoning styles, or personal experiences with online incivility could moderate these effects. Third, the model is primarily grounded in a Western ethical perspective, and cross-cultural research is needed to examine whether the principles and constructs proposed translate effectively in societies with different moral norms or communication styles. Acknowledging these limitations provides important context for interpreting the framework's contributions and highlights key directions for future inquiry.

There are many other possibilities of future work stemming from the conceptual model. Community nurturance is a newly conceived construct, which could benefit from a formal study to determine measurable, manifest survey items that reflect the construct. Empirical studies could further examine how different forms of brand intervention vary the perceptions of moral duty, moral courage, and community nurturance. Future work could also investigate industry-specific or platform-based contingencies that may shape stakeholder responses to brand interventions. Experimental and longitudinal designs could help identify causal pathways between our ethical constructs and exchange-based outcomes such as loyalty, trust, and brand advocacy. Additionally, qualitative approaches may reveal nuanced stakeholder interpretations of moral duty, moral courage, and care-based practices, offering richer insights into the lived experiences of complainants, observers, and brand representatives in digital service recovery environments.

References

- Adams, J. Stacy (1965), "Inequity in Social Exchange," In Leonard Berkowitz (Ed.), *Advances in Experimental Social Psychology*, Vol. 2. New York: Academic Press, 267–99.
- Andersson, Lynne M., and Christine M. Pearson (1999), "Tit for tat? The spiraling effect of incivility in the workplace," *Academy of Management Review*, 24(3), 452–471.
- Appel, Gil, Lauren Grewal, Rhonda Hadi, and Andrew T. Stephen (2020), "The future of social media in marketing," *Journal of the Academy of Marketing Science*, 48 (1), 79–95.
- Aristotle (2019), *Nicomachean ethics*. Indianapolis, IN: Hackett Publishing.

- Arnold, Denis G. and Roxanne L. Ross (2023), "Care in management: A review and justification of an organizational value," *Business Ethics Quarterly*, 33(4), 617–654.
- Bacile, Todd J., Jeremy S. Wolter, Alexis M. Allen, and Pei Xu (2018), "The Effects of Online Incivility and Consumer-to-Consumer Interactional Justice on Complainants, Observers, and Service Providers During Social Media Service Recovery," *Journal of Interactive Marketing*, 44 (1), 60-81.
- Bacile, Todd J. (2020), "Digital customer service and customer-to-customer interactions: investigating the effect of online incivility on customer perceived service climate," *Journal of Service Management*, 31 (3), 441-464.
- Bacile, Todd J., Alexandra Krallman, Jeremy S. Wolter, and Nicole Dilg Beachum (2020), "The value disruption of uncivil other-customers during online service recovery," *Journal of Services Marketing*, 34 (4), 483-498.
- Bacile, Todd J., Ayse B. Elmadag, Mehmet Okan., Denitsa Dineva, and Ania I. Rynarzewska (2025), "Schadenfreude and sympathy: Observer reactions to malicious joy during social media service recovery," *Journal of Interactive Marketing*, 60(1), 44-64.
- Baker, Stacey Menzel, James W. Gentry, and Terri L. Rittenburg (2005), "Building understanding of the domain of consumer vulnerability," *Journal of Macromarketing*, 25 (2), 128-139.
- Béal, Mathieu, Yany Grégoire, and Francois A. Carrillat (2023), "Let's laugh about it! Using humor to address complainers' online incivility," *Journal of Interactive Marketing*, 58 (1), 34–51.
- Blackler, Liz, Amy E. Scharf, Martin Chin, and Louis P. Voigt (2022), "Is there a role for ethics in addressing healthcare incivility?," *Nursing Ethics*, 29 (6), 1466-1475.
- Blodgett, Jeffrey G., Donald H. Granbois, and Rockney G. Walters (1993), "The effects of perceived justice on complainants' negative word-of-mouth behavior and repatronage intentions," *Journal of Retailing*, 69 (4), 399-428.
- Blodgett, Jeffrey G., Donna J. Hill, and Stephen S. Tax (1997), "The Effects of Distributive, Procedural, and Interactional Justice on Postcomplaint Behavior," *Journal of Retailing*, 73 (2), 185–210.
- Brønn, Peggy Simcic, and Deborah Vidaver-Cohen (2009), "Corporate motives for social initiative: Legitimacy, sustainability, or the bottom line?," *Journal of Business Ethics*, 87 (1), 91-109.
- Cenophat, Sadrac, Martin Eisend, Tomás Bayón, and Alexander Haas (2024), "The role of customer relationship vulnerability in service recovery," *Journal of Service Research*, 27 (2) 283-301.
- Dartey-Baah, Kwasi, Samuel Howard Quartey, and Maxwell Tabi Wilberforce (2024), "Organizational ethics and workplace incivility: the mediating effects of transformational and transactional leadership styles," *Leadership & Organization Development Journal*, 45 (5), 792-810.
- Dineva, Denitsa (2023), "Consumer Incivility in Virtual Spaces: Implications for Interactive Marketing Research and Practice," in: Wang, C.L. (eds.), *The Palgrave Handbook of Interactive Marketing*. Palgrave Macmillan, Cham.
- Dineva, Denitsa, Kate Daunt, and Todd J. Bacile (2025), "Communication accommodation for de-escalating consumer tensions in online brand communities," *Journal of Business Research*, 192, 115281.
- Foot, Philippa (1985), "Utilitarianism and the Virtues," *Mind*, 94 (374), 196-209.
- Gelbrich, Katja and Holger Roschk (2011), "A meta-analysis of organizational complaint handling and customer responses," *Journal of Service Research*, 14 (1), 24-43.

- Gilligan, Carol (1993), *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.
- Grégoire, Yany, and Anna S. Mattila (2021), "Service failure and recovery at the crossroads: Recommendations to revitalize the field and its influence," *Journal of Service Research*, 24 (3), 323-328.
- Grégoire, Yany, Katja Gelbrich, Chiara Orsingher, and Yves Van Vaerenbergh (2025), "Breaking the mold: Redefining service failure and recovery," *Journal of Service Research*, 28(3), 375-381.
- Hawk, Thomas F. (2011), "An Ethic of Care: A Relational Ethic for the Relational Characteristics of Organizations," in: Hamington, Maurice, Sander-Staudt, Maureen (eds), *Applying Care Ethics to Business* (Vol. 34), Springer Science & Business Media.
- Held, Virginia (2006), *The ethics of care: Personal, political, and global*. Oxford University Press.
- Hogreve, Jens, Nicola Bilstein, and Kathrin Hoerner (2019), "Service recovery on stage: Effects of social media recovery on virtually present others," *Journal of Service Research*, 22 (4), 421-439.
- Huang, Ran, and Sejin Ha (2024), "How do consumer-to-consumer interactions affect bystanders on corporate social media (CSM)? (In)civility in advocates' responses and complainant-bystander psychological distance," *The Service Industries Journal*, 44 (11-12), 789-812
- Jaakkola, Elina (2020), "Designing conceptual articles: Four approaches," *AMS Review*, 10 (1), 18-26.
- Johnen, Marius and Oliver Schnittka (2019), "When pushing back is good: The effectiveness of brand responses to social media complaints," *Journal of the Academy of Marketing Science*, 47 (5), 858-878.
- Kant, Immanuel (1997), *Groundwork of the metaphysics of morals*. Cambridge: Cambridge University Press.
- Khamitov, Mansur, Yany Grégoire, and Anshu Suri (2020), "A systematic review of brand transgression, service failure recovery and product-harm crisis: integration and guiding insights," *Journal of the Academy of Marketing Science*, 48, 519-542.
- Kristjánsson, Kristján (2025), "The Enabling Role of the Moral Virtue of Courage", in Blaine J. Fowers (ed.), *The Virtue of Courage*. New York, Oxford Academic.
- Labrecque, Lauren I., Ereni Markos, Mujde Yuksel, and Tracy A. Khan (2022), "Value Creation (vs Value Destruction) as an Unintended Consequence of Negative Comments on [Innocuous] Brand Social Media Posts," *Journal of Interactive Marketing*, 57 (1), 115-140.
- Lages, Cristiana R., Rodrigo Perez-Vega, Selma Kadić-Maglajlić, and Niloofar Borghei-Razavi (2023), "A systematic review and bibliometric analysis of the dark side of customer behavior: An integrative customer incivility framework," *Journal of Business Research*, 161, 113779.
- Mattila, Anna S. (2001), "The effectiveness of service recovery in a multi-industry setting," *Journal of Services Marketing*, 15 (7), 583-596.
- McDowell, John (1979), "Virtue and reason," *The Monist*, 62 (3), 331-350.
- Microsoft (2024), "Digital Safety | Global Online Safety Survey Results", available at: <https://www.microsoft.com/en-us/DigitalSafety/research/global-online-safety-survey> (accessed May 1, 2025).
- Miller, Janis L., Christopher W. Craighead, and Kirk R. Karwan (2000), "Service recovery: a framework and empirical investigation," *Journal of Operations Management*, 18 (4), 387-400.
- Noddings, Nel (1984), *Caring: A feminine approach to ethics and moral education*. University of California Press.

- Noddings, Nel (2015), "Care ethics and 'caring' organizations", in Daniel Engster and Maurice Hamington (eds), *Care Ethics and Political Theory*. Oxford Academic Online.
- Nyholm, Sven (2015), "Kant's Universal Law Formula Revisited," *Metaphilosophy*, 46 (2), 280-299.
- Otteson, Michael (2024), "Courage in Aristotle's Theory of the Good," *The Journal of Value Inquiry*, 58 (3), 443-459.
- Pettersen, Tove (2011), "The ethics of care: Normative structures and empirical implications," *Health Care Analysis*, 19 (1), 51-64.
- Porath, Christine, Deborah MacInnis, and Valerie S. Folkes (2011), "It's unfair: Why customers who merely observe an uncivil employee abandon the company," *Journal of Service Research*, 14 (3), 302-317.
- Putman, Daniel (1997), "Psychological courage," *Philosophy, Psychiatry, & Psychology*, 4 (1), 1-11.
- Rawls, John (1971), *A theory of justice*. Harvard University Press.
- Santori, Paolo, (2024), "The Market in the Kingdom of Ends: Kant's Moral Philosophy for Business Ethics," *Philosophy of Management*, 23 (2), 239-256
- Schaefer, Tobias and Julia Schamari (2016), "Service recovery via social media: The social influence effects of virtual presence," *Journal of Service Research*, 19 (2), 192–208.
- Schwenkenbecher, Anne (2022), "Collective inaction, omission, and non-action: When not acting is indeed on 'us'," *Synthese*, 200 (5), 423.
- Shmargad, Yotam, Kevin Coe, Kate Kenski, and Stephen A. Rains (2022), "Social norms and the dynamics of online incivility," *Social Science Computer Review*, 40 (3), 717-735.
- Solomon, Robert C. (1992), "Corporate roles, personal virtues: An Aristotelean approach to business ethics," *Business Ethics Quarterly*, 2(3), 317–339.
- Suchman, Mark C. (1995), "Managing legitimacy: Strategic and institutional approaches," *Academy of Management Review*, 20(3), 571–610.
- Suler, John (2004), "The online disinhibition effect," *Cyberpsychology & Behavior*, 7(3), 321-326.
- Tax, Stephen S., Stephen W. Brown, and Murali Chandrashekar (1998), "Customer evaluations of service complaint experiences: implications for relationship marketing," *Journal of Marketing*, 62 (2), 60-76.
- Tronto, Joan (2020), *Moral boundaries: A political argument for an ethic of care*. Routledge.
- Van Vaerenbergh, Yves, Simon Hazée, and Annelies Costers. (2018), "Customer participation in service recovery: A meta-analysis," *Marketing Letters*, 29 (4), 465-483.
- Van Vaerenbergh, Yves, Dorottya Varga, Arne De Keyser, and Chiara Orsingher (2019), "The service recovery journey: Conceptualization, integration, and directions for future research," *Journal of Service Research*, 22 (2), 103-119.
- Varnali, Kaan and Caner Çeşmeci (2022), "Customer responses to service failures on social media," *Journal of Services Marketing*, 36 (5), 691–709.
- Wolter, Jeremy S., Todd J. Bacile, and Pei Xu (2023), "How Online Incivility Affects Consumer Engagement Behavior on Brands' Social Media," *Journal of Service Research*, 26 (1), 103–119.

SESSION 21.4: FROM PLACEMENT TO PEOPLE: CONTEXT THAT MAKES OR BREAKS SERVICE

Moderators:

Alexandra Krallman

Summary Brief

Service Environment Spillovers on Core Service Quality Perceptions Across International Contexts

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Service firms frequently invest in designing elite customer experiences to boost customer satisfaction, loyalty, and profits. While these experiences can delight customers and achieve these goals, firms have limited control over external environmental factors that may shape customer perceptions of these offerings. Therefore, we investigate to what extent the broader service environment shapes customer evaluations of core service offerings. Additionally, we investigate how psychological distances condition the impact of broader service environment cues in global service settings. Using a sample consisting of 3,524 airport lounge reviews across 104 airlines and 54 different countries from 2008-2023 and robust econometric models that account for endogeneity, we find that there is a positive spillover effect of the quality of the broader service environment on core service quality perceptions and that psychological distances moderate these effects. This research advances service research theory and offers several practical implications for service firms.

Introduction

Firms across service industries frequently invest in optimizing customer experiences as a strategic means to enhance satisfaction, loyalty, and profitability. For instance, Marriott International has recently allocated approximately \$100 million per quarter to technological upgrades intended to improve property amenities and streamline booking processes as a means to enhance the service experience for its customers (CIO Dive 2024; Marriott International 2024). Similarly, Delta Airlines has announced plans to expand, renovate, and construct airport lounges during 2025 across major U.S. cities—on top of its \$12 billion of investments over the prior decade (Delta Air Lines 2022). Although such enhancements have the potential to delight customers and yield positive business outcomes, their success ultimately depends on whether the perceived value of the experience justifies the substantial financial outlay. This consideration highlights a critical challenge: even when service firms deliver high-quality, exclusive offerings, customer perceptions may be shaped by environmental cues that lie beyond the firm's direct control. Understanding the influence of the broader service context is therefore essential to maximizing the effectiveness of these investments. This raises a central research question: to what extent does the broader service environment shape customer evaluations of core service offerings?

This study makes three key contributions to the literature. First, we propose a positive spillover—or halo—effect, whereby a high-quality service environment enhances evaluations of a core service offering. Drawing on cue diagnosticity theory (Skowronski and Carlston 1987), we argue that the broader service environment serves as a diagnostic cue in consumers' assessments of core service quality. Second, we draw on construal level theory (Lieberman, Trope, and Wakslak 2007; Trope and Liberman 2010) and propose that psychological distance including cultural, economic, and governance distance moderates this spillover effect. Third, we show that not all dimensions of psychological distance exert the same effect. While cultural and economic distance attenuate the influence of the broader service environment quality on core service quality perceptions, governance distance amplifies it.

Theoretical and Conceptual Background

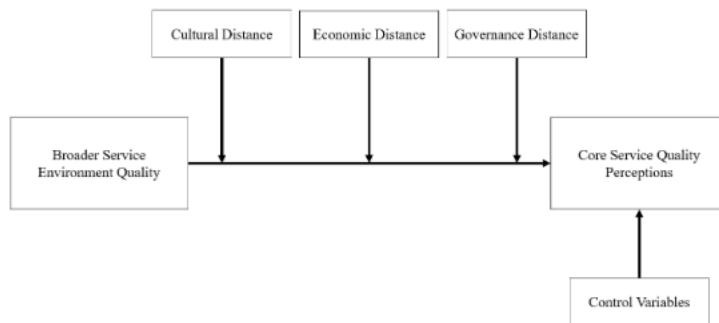
Service Offerings, Service Experiences, and the Service Environment

Research has differentiated the core service offering from other customer-firm touchpoints. For instance, Lemon and Verhoef (2016) identify the prepurchase, purchase, and postpurchase stages of the customer experience as components of the broader customer journey. These touchpoints are often related to associations or experiences outside of the core service offering, highlighting how external influences shape consumer perceptions of the core service offering. While the service literature has examined how associations or experiences outside of the core service influence consumer perceptions of the core service quality, there is limited knowledge about how the broader service

environment quality spills over onto core service quality perceptions. This study seeks to address this gap in the literature by testing the model depicted in Figure 1.

The core service offering can take place in a setting that is distinct from, but embedded within, a broader service environment. Here, we highlight the distinction between the core service offering and the broader service environment. The core service offering is the focal service that a customer seeks and consumes. The broader service environment refers to the external setting within which a core service offering is embedded, but which remains outside the direct control of the core service provider. In such service environments, the customer is generally required to pass through the broader service environment before experiencing the core service offering. For example, for customers to experience the core service offering of an airport lounge, they must pass through the broader service environment, which is the airport in which the lounge is located. Importantly, the conditions in the broader service environment are likely to have a spillover effect and influence a customer's state of mind prior to and during the core service offering.

Figure 1. Conceptual model



Hypothesis Development

Consumers rely on cues to make judgements about products and services. Consumers generalize their perceptions from that initial cue of the known product or service, allowing it to shape perceptions of related products or services. This is what is known as a halo, or spillover, effect. The halo effect can create a cognitive bias based on initial impressions of a person, product, or brand (Dagger et al. 2013). Positive or negative impressions then influence subsequent judgments in potentially unrelated contexts, and these judgments tend to reflect initial impressions. For example, in the service setting, a service partner's quality can create an initial baseline bias towards perceptions of the quality of a primary service provider (Bourdeau, Cronin, and Voorhees 2007). Therefore, we hypothesize:

H₁: Broader service environment quality positively influences core service quality perceptions.

Construal Level Theory and Psychological Distance

CLT explains the relationship between psychological distance and levels of mental abstraction (Liberman, Trope, and Wakslak 2007; Trope & Liberman 2010). The core premise of CLT is that individuals perceive objects, products, people, and events at varying levels of mental abstraction—known as mental construal—depending on their psychological distance (Liberman, Tope, and Wakslak 2007). When psychological distance is high, people tend to think in the abstract and focus on central features of an object or experience. When psychological distance is low, people tend to pay more attention to detail and focus on peripheral features of an object or experience.

Cultural distance, economic distance, and governance distance constitute forms of psychological distance, as they capture perceptions of social proximity based on contrasting cultural, economic, and governance norms (Trope and Liberman 2010). When these “distances” are high, people will tend to think in the abstract and focus on core features rather than peripheral features. Cultural distance is represents the differences between national cultures with respect to differences of the norms and values of the involved parties. In service settings where there is a high cultural distance, the cultural norms and values to which a consumer is accustomed are quite different from the cultural norms and values they are experiencing in the service context. This leads to increased distraction due to these cultural and social differences surrounding them in a service environment. Thus, this level of distraction and abstract constual reduces the ability of consumers to effectively diagnose the peripheral cues (Trope and Liberman 2010) related to the quality of the broader service environment. Since these peripheral cues of the broader service

environment are less likely to be recognized, the potential diagnosticity, and influence, of the cue of the quality of the broader service environment will likely be attenuated. Therefore,

H₂: Cultural distance moderates the positive effect of broader service environment quality on core service quality perceptions, such that it is weaker when cultural distance is high and stronger when cultural distance is low.

Economic distance presents a contextual form of psychological distance that compares the economic development between parties (Hutzschenreuter et al. 2014). In the service context, we view economic distance from a directional standpoint where a positive (negative) economic distance represents a consumer who is from a much more (less) economically developed country than the country in which they experience the service. In this context, consumers experiencing greater positive economic distance are likely to be more distracted by the drastically lower economic development of the country in which the service environment exists, leading to more abstract thinking. Additionally, consumers experiencing greater positive economic distance are likely to have higher expectations, and therefore the quality of the broader service environment is likely to be less impressive for them, regardless of the quality, due to their norms of higher economic standards. This leads to these consumers to view the broader service environment quality in a more ambiguous or abstract manner and it being a less diagnostic cue for core service quality. Thus:

H₃: Economic distance moderates the positive effect of broader service environment quality on core service quality perceptions, such that it is weaker when economic distance is high (more positive) and stronger when economic distance is low (more negative).

Governance distance reflects psychological distance based on differing institutional and structural norms. For consumers interacting with services across nations, a positive (negative) governance distance represents a consumer from a country with a much higher (lower) level of governance than the country in which they are experiencing the service. It is expected that a consumer with a high level of governance distance may be more cautious about interacting with others in a setting with lower governance, due to increased uncertainty and instability within the environment. As a result of these distractions, the consumer is likely to view the service environment in a more abstract way, diminishing the diagnosticity of the cue of the quality of the broader service environment on the core service quality. In comparison, when a consumer has a more negative governance distance, such that they are from a country in which governance is low but traveling to a country where governance is high, there may be less distraction, since they may feel more at ease in a place with higher governance where they can trust that rules and regulations provide stability. This triggers more concrete level thinking about the quality of the broader service environment, increasing the salience and diagnosticity of the cues within the broader service environment. Thus:

H₄: Governance distance moderates the positive effect of broader service environment quality on core service quality perceptions, such that it is weaker when governance distance is high (more positive) and stronger when governance distance is low (more negative).

Method

Data and Sample

We collect data from a variety of sources, including airport and airport lounge data from Skytrax (airlinequality.com), cultural values data from The Culture Factor Group, and economic and governance data from The World Bank. Skytrax is a company that is a leader in providing quality ratings for customer experiences within the airline industry from across the globe. From the website, we gather a sample of airport and airport lounge quality data, including online reviews. The Culture Factor Group provides data on Hofstede's cultural dimensions (Hofstede 1984) for many countries around the world. Lastly, The World Bank is an international organization which provides financial, economic, and government data for countries across the globe. In summary, our sample consists of 3,524 airport lounge reviews across 104 airlines and 54 different countries from 2008-2023.

Variables

We use the valence of online reviews for lounges as a measure of service experience perceptions as our dependent variable. Specifically, we measure the valence of the review through natural language processing techniques to examine the valence of the text of the reviews. We measure airport quality by assessing the average quality ratings of the airport in which the lounge resides prior to the time of the review of the consumer. We measure

cultural distance using Hofstede's cultural dimensions of power distance, individualism, motivation, and uncertainty to capture the difference between the consumer leaving the review and the country in which they are experiencing the service. Next, we measure economic distance as the distance between the GDP per capita of the home country of the consumer and the country in which the airport lounge exists. Finally, we measure governance distance using six items from the World Bank (Hutzschenreuter et al. 2014; Kostova et al. 2020) including voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption (Kaufmann et al. 2011). We calculate a composite measure of governance (e.g., Hutzschenreuter et al. 2014) and then subtract the composite governance score of the country in which the lounge exists from the reviewer's home country. A positive score indicates that the reviewer's home country has a higher composite governance than the country in which the lounge exists. A variety of control variables are also included in the study including the word of mouth volume about the airport in which the lounge resides, verification status of each review, number of past reviews left by each consumer, emotionality of the text in each review, and the certainty of the text in each review.

Model

We used regression models to test the hypotheses in this study. Additionally, we address several different sources of endogeneity including reverse causality through our model design. We address omitted variable bias through the inclusion of month, year, reviewer country, and airline fixed effects. We also use an instrumental variable approach to correct for the endogeneity of airport quality using a peer-based instrument and the control function approach (Petrin and Train 2010).

Results

The results for the focal model can be found in Table 1. Model 1 presents the results of the spillover effect of airport quality on airport lounge perceptions with focal variables included. Model 2 includes the main effect with controls. Lastly, Model 3 includes interactions to test the moderating hypotheses. Results from Model 3 show that there exists a positive spillover effect of airport quality ($\beta = .336$; $p = .000$) on lounge review valence, providing evidence to support the positive spillover of airport quality on lounge perceptions as hypothesized in H1. Next, the interaction term between airport quality and cultural distance ($\beta = -.010$; $p = .000$) is negative and significant, suggesting that the positive spillover of airport quality on lounge review valence is attenuated when the consumer has a greater cultural distance from the country in which the airport and lounge exist. Thus, H2 was supported. The interaction between airport quality and economic distance ($\beta = -.184$; $p = .034$) was also negative and significant, supporting H3. Finally, we test H4 by interpreting the interaction between airport quality and governance distance. Results show that the interaction ($\beta = .159$; $p = .076$) is positive and marginally significant, reversing H4. Thus, the positive spillover effect is strengthened when a consumer is from a country with greater governance than the country in which the airport and lounge exist.

Table 1. Model results

	Model 1		Model 2		Model 3	
	β (SD)	p -value (T-value)	β (SD)	p -value (T-value)	β (SD)	p -value (T-value)
Airport Quality	.167*** (.051)	.001 (3.300)	.180** (.073)	.016 (2.460)	.336*** (.082)	.000 (4.110)
Cultural Distance	-.005 (.003)	.156 (1.430)	-.007** (.003)	.035 (2.140)	.039*** (.013)	.004 (2.970)
Economic Distance	.097 (.210)	.645 (.460)	.032 (.210)	.881 (.150)	.758* (.427)	.079 (1.780)
Governance Distance	-.412** (.188)	.031 (2.190)	-.349* (.186)	.064 (1.870)	-1.012** (.411)	.016 (2.460)
Airport Qual. *					-.010*** (.003)	.000 (3.620)
Cultural Dist. *					-.184** (.085)	.034 (2.160)
Economic Dist. *					.159* (.089)	.076 (1.800)
Govern Dist. *						
Constant	4.697***	.000	5.214***	.000	4.590***	.000

	(.237)	(19.790)	(.670)	(7.780)	(.704)	(6.520)
R-Sq.	.144		.174		.176	
N	3524		3179		3179	

Notes: N = 3524; Standard errors are clustered by airline. Controls, endogeneity corrections, as well as month, year, reviewer country, and airline fixed effects are included.

*** $p < .01$; ** $p < .05$; * $p < .10$

Discussion

This research investigates the halo (spillover) effect of the broader service environment quality on core service quality perceptions as well as the moderating effects of cultural, economic, and governance distance. We investigate this by examining the relationship between airport quality (broader service environment) and airport lounge (core service) quality perceptions using a robust sample of international travelers and airports from around the globe. We find that there is a consistent positive spillover effect of the broader service environment on core service quality perceptions. This relationship is attenuated when cultural distance is greater and economic distance is more positive, but the relationship is strengthened when governance distance is more positive. These findings provide relevant and important implications for both advancing theory and enhancing managerial decision-making.

References

- Bourdeau, B. L., Cronin Jr, J. J., & Voorhees, C. M. (2007). Modeling service alliances: An exploratory investigation of spillover effects in service partnerships. *Strategic Management Journal*, 28(6), 609–622.
- CIO Dive (2024), “Marriott gears up for another year of major tech spending,” (May 2, 2024), <https://www.ciodive.com/news/marriott-international-tech-spend-digital-transformation-plan-ai/715036/>.
- Dagger, T. S., Danaher, P. J., Sweeney, J. C., & McColl-Kennedy, J. R. (2013). Selective Halo Effects Arising From Improving the Interpersonal Skills of Frontline Employees. *Journal of Service Research*, 16(4), 488–502.
- Delta Air Lines (2022), “Media Kit and Fact Sheet: Delta’s LAX Investment,” (March 29, 2022), <https://news.delta.com/mediakit/media-kit-and-fact-sheet-deltas-lax-investment/>.
- Hofstede, G. (1984). *Culture’s consequences: International differences in work-related values* (Vol. 5). Sage.
- Hutzschenreuter, T., Kleindienst, I., & Lange, S. (2014). Added Psychic Distance Stimuli and MNE Performance. *Journal of International Management*, 20(1), 38–54.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2011). The Worldwide Governance Indicators: Methodology and Analytical Issues. *Hague Journal on the Rule of Law*, 3(2), 220–246.
- Kostova, T., Beugelsdijk, S., Scott, W. R., Kunst, V. E., Chua, C. H., & van Essen, M. (2020). The construct of institutional distance through the lens of different institutional perspectives: Review, analysis, and recommendations. *Journal of International Business Studies*, 51(4), 467–497.
- Lemon, K. N., & Verhoef, P. C. (2016). Understanding Customer Experience Throughout the Customer Journey. *Journal of Marketing*, 80(6), 69–96.
- Lieberman, N., Trope, Y., & Wakslak, C. (2007). Construal level theory and consumer behavior. *Journal of Consumer Psychology*, 17(2), 113–117.
- Marriott International (2024), “Marriott International 2024 Annual Report,” (accessed May 19, 2025), <https://marriott.gcs-web.com/static-files/b82978a6-9d28-4e38-9855-fc4ae2cebe11/>.
- Petrin, A., & Train, K. (2010). A control function approach to endogeneity in consumer choice models. *Journal of marketing research*, 47(1), 3–13.
- Skowronski, J. J., & Carlston, D. E. (1987). Social judgment and social memory: The role of cue diagnosticity in

- negativity, positivity, and extremity biases. *Journal of Personality and Social Psychology*, 52(4), 689–699.
- Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review*, 117(2), 440–463.

SESSION 21.5: EXPERIENTIAL PEDAGOGY FOR AN AI ERA

Moderators:

Robert Moore

Full Paper

Teaching in the Age of AI: Who Do Learners Prefer Student Perceptions of AI vs. Human Instructors in Online Education

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As artificial intelligence (AI) becomes increasingly integrated into higher education, this study investigates how individuals perceive online courses designed and managed by AI compared to those developed by human instructors. Drawing on survey responses from 224 participants, we examined attitudes across three domains: instructional quality, assessment and feedback, and career preparation. Results reveal a consistent preference for human-designed courses, especially among individuals with lower AI proficiency. While AI was credited for efficiency and consistency in grading, human instructors were viewed more favorably in areas such as engagement, clarity, feedback quality, and job preparedness. No statistically significant differences emerged across age, gender, or level of education. These findings highlight the importance of technological literacy in shaping learners' attitudes toward AI in education and underscore the enduring value of human-centered teaching in a rapidly evolving digital learning environment.

Overview of AI in Education

Artificial Intelligence (AI) has rapidly transformed a wide range of industries in recent years, and education is no exception. Defined as systems capable of performing tasks that typically require human intelligence, such as learning, problem-solving, and decision-making (Russell and Norvig, 2016), AI has become increasingly embedded in today's educational landscape. The use of AI in education, often referred to as AIED, covers a broad spectrum of tools and platforms that aim to improve learning outcomes, personalize the educational experience, and reduce the burden of administrative work (Hwang et al., 2020).

Higher education has seen a significant impact from AI technologies. Tools like conversational AI models and advanced AI systems are used to aid students in research, tutoring, and content generation for educational purposes (Johnson et al., 2015). Additionally, AI-driven tools such as intelligent tutoring systems, adaptive learning platforms, and automated grading systems are revolutionizing the educational landscape (Luckin et al., 2016). These initiatives offer learners a variety of educational materials customized to their specific academic needs and disciplines (Akgun & Greenhow, 2021). Notably, adaptive learning is a major benefit of AI in education. In contrast to the traditional uniform approach in classroom teaching, AI-powered adaptive learning platforms aim to maximize learning efficiency (Owoc et al., 2019).

AI in Education: Potentials & Benefits

The benefits of AIED are extensive; AI offers global access to high-quality education, efficiency in terms of time and cost, and the potential to create personalized, adaptive, and interactive learning environments (Kamalov, Calonge, and Gurrib, 2023). AI facilitates global access to education by overcoming geographical and linguistic barriers. For example, AI-driven language learning platforms and translation tools enable students worldwide to access educational content previously limited by language and location. These technologies democratize education, making high-quality learning resources available to a broader audience (Holmes et al., 2019; Almasri, 2024).

In terms of personalized learning, platforms such as Coursera, Knewton, and ALEKS tailor the difficulty of lessons in real time based on individual student data, thereby boosting engagement and understanding (Craig et al., 2013; Conklin, 2016; Korableva et al., 2019). Moreover, Intelligent Tutoring Systems (ITS) like Cognitive Tutors offer customized support by responding to the unique needs of each learner (Murray, Blessing, and Ainsworth, 2003). AI also contributes to improved educational outcomes using predictive analytics and early intervention strategies, identifying and supporting students at risk to enhance their academic performance and retention rates. This proactive approach provides timely support and targeted assistance, resulting in overall better educational outcomes (Chaudhry and Kazim, 2021).

Not only do these technologies improve learning outcomes but they equip educators with essential knowledge of students' learning characteristics and progress, enabling timely interventions and support (Chu et al., 2022; Bedenlier et al., 2020; Holmes et al., 2019). The rising interest in AIEd is evident, as learning, innovation, and knowledge creation are critical elements of the modern economy. Although the idea of automating teacher tasks is still somewhat unclear and debated (Selwyn, 2019; Sperling et al., 2022), AI's real potential might lie in enhancing human cognitive abilities in learning contexts (Holmes and Tuomi, 2022). Rather than replacing educators, AI can augment their efforts by delivering personalized and adaptive learning experiences that meet individual students' needs.

AI in Education: Challenges & Concerns

Despite the many advantages, implementing AI in education comes with significant concerns. The rapid growth of AI has led to an increase in ethical issues (Maslej et al., 2023). One major concern is privacy. AI systems often need to access large amounts of personal data, which raises serious questions about data security and student privacy (Cheng et al., 2022).

Another significant concern is the risk of bias in AI algorithms and the uneven access to technology for students (Selwyn, 2019). When AI systems are trained on data that includes biases, these biases can be carried forward, causing unjust and discriminatory outcomes (Zajko, 2022).

Access to technology can be considered as an issue. Not all students have the necessary devices, software, or reliable internet connections to benefit from AI-based educational tools. This digital divide can further disadvantage students from lower socioeconomic backgrounds, increasing the gap between different groups.

AI can also lead to social challenges, such as student isolation and diminished interpersonal skills. Increased reliance on AI for education may reduce face-to-face interactions, essential for developing social and emotional skills. This reduction can impede the growth of teamwork and peer relationships, crucial elements of a comprehensive education. (Zhang et al., 2023).

Excessive dependence on AI technology can also diminish critical thinking and problem-solving skills. When students rely heavily on AI for answers, it can hinder their creativity and independent thinking, both of which are essential for personal and academic growth. (Passi and Vorvoreanu, 2022)

Concerns also exist regarding the accountability and transparency of AI in education. AI decisions on learning paths, assessments, or interventions must be transparent and fair. Without adequate oversight, these systems might negatively impact students, making it challenging to understand or contest such decisions (Memarian and Doleck, 2023).

To effectively utilize AI's potential in higher education, it is crucial to address these challenges. Developing strategies to safeguard privacy, ensure equitable technology access, minimize algorithmic bias, and promote social interaction and critical thinking among students is necessary. By confronting these issues, the education sector can fully benefit from AI while reducing its drawbacks.

This Research

Despite some concerns, the influence of AI on education remains highly positive and promising. Ongoing developments in AI technology continue to transform the educational landscape, enhancing accessibility, efficiency, and personalization of learning (Zawacki-Richter et al., 2019).

In recent years, the use of Artificial Intelligence (AI) in higher education has expanded significantly, particularly in online learning environments. From AI-powered feedback tools to personalized learning platforms, the presence of AI in course delivery is growing. However, while much attention has been given to the technical capabilities of these tools, less is known about how students perceive AI's role in shaping their learning experience. As AI becomes more integrated into education, designing, managing, grading, and even adapting course content, it is essential to understand how students evaluate its effectiveness and whether they trust it in comparison to traditional, human-led instruction.

This study investigates students' perceptions of online courses designed and managed either by AI or by human instructors. Specifically, it explores students' views across key dimensions such as clarity of instruction, fairness and accuracy of grading, engagement, relevance to career goals, and preparedness for the job market.

By comparing AI-led and human-led online course experiences, the study aims to understand what students value most, where they see strengths or weaknesses in AI-driven education, and how comfortable they feel with AI's growing presence in course design and delivery. The findings will help identify both opportunities and concerns related to the expanding role of AI in higher education.

LITERATURE REVIEW

AI in Education: An Overview

Artificial Intelligence (AI) refers to the capability of machines to adapt to new situations, solve problems, make plans, and perform tasks that typically require human intelligence. This involves processes such as learning (gathering information and understanding how to use it), reasoning (applying rules to draw conclusions), and self-correction (Coppin, 2004; Whitby, 2008).

The development of AI in education began with early technologies such as computer-assisted instruction (CAI) in the 1960s, which sought to create interactive learning experiences for students (Suppes & Morningstar, 1969). Since then, AI advancements have produced increasingly sophisticated educational tools.

In the educational context, AI includes technologies designed to enhance learning, such as adaptive learning platforms, intelligent tutoring systems, and automated assessment tools (Chen et al., 2020; Brusilovsky, 2012; Woolf, 2008).

An adaptive learning system is a digital platform that assesses a learner's skills and adjusts content to their needs, providing personalized feedback and continuously enhancing learning (Gransden et al., 2024). AI supports this through data mining, intelligent teaching systems, learning analytics, and real-time analysis. These systems gather student behavior data, plan optimal learning paths, and offer personalized experiences, significantly improving learning efficiency and outcomes (Van Der Vorst & Jellic, 2019; Cui et al., 2019).

These systems are increasingly appealing to students because they allow for control over different aspects of the learning process (Banditvilai, 2016).

Intelligent tutoring systems (ITS) are computer-based instructional systems designed to provide immediate, personalized feedback and guidance to students by interpreting their problem-solving steps, simulating a human tutor's responses, and improving learning outcomes through adaptive interactions and continuous assessment (VanLehn, 2011).

Automated assessment tools are systems designed to evaluate student responses, often using algorithms to mark multiple-choice questions, essays, and short-answer responses. They offer immediate feedback, enhance objectivity, save resources, and support large-scale testing environments while improving the overall efficiency of the assessment process (Jordan, 2016).

These advancements highlight AI's potential to revolutionize educational practices and enhance learning outcomes.

The Role of AI in Personalized Learning

As AI technologies become more integrated into education, one of their most promising applications lies in the area of personalized learning. By tailoring instruction to individual students' needs and preferences, AI has the potential to improve engagement, learning outcomes, and overall satisfaction.

AI systems can adapt educational content to meet individual students' specific needs, preferences, and learning paces. This adaptive approach aims to enhance the overall quality of education (Kabudi, Pappas and Olsen, 2021). Intelligent tutoring systems (ITS), which use natural language processing and machine learning to mimic human tutors, offer customized guidance based on learner progress.

AI-based adaptive learning systems can boost student engagement more than traditional methods by quickly adjusting task difficulty to keep students challenged and motivated, though scalability and integration challenges remain in real-world applications (Holmes et al., 2019). AI capabilities are also revolutionizing teaching and learning, through intelligent systems, automated grading, and predictive analytics, while user-friendly, accessible tools are key to supporting personalized learning and adaptive assessments.

Despite resistance to change and ethical dilemmas, AI shows strong potential for transforming education, especially when paired with ethical practices and human-AI collaboration (Algahtani, 2024). In online education, AI enhances learner-instructor interactions by improving communication, handling routine inquiries, and offering just-in-time support. At the same time, concerns about privacy, surveillance, and over-standardization, especially when using eye tracking and facial expression analysis, have been raised. To build trust and ensure responsible use, researchers recommend explainable AI, human oversight, and transparent data practices (Seo et al., 2021).

While the research highlights AI's growing ability to personalize learning and enhance educational experiences, it also points to unresolved concerns about trust, transparency, and the overall impact on students. As AI tools take on increasingly complex instructional roles, including course design, grading, and feedback, it becomes essential to understand how students perceive these shifts, especially in comparison to traditional, human-designed courses. A direct comparison of student perceptions across both formats can offer valuable insights into the perceived strengths and limitations of AI in education and inform how institutions might responsibly and effectively integrate AI into course delivery.

Role of AI in Education for Future Job Preparedness

Incorporating artificial intelligence into the educational framework significantly enhances students' preparedness for the workforce by offering customized learning experiences and fostering essential skills. AI technologies tailor instruction to individual learning preferences, thereby increasing engagement and understanding. For example, AI-powered adaptive learning platforms have been demonstrated to elevate test performance and alleviate anxiety, thus nurturing a conducive learning atmosphere (Holmes, Bialik, & Fadel, 2019). This individualized method ensures that students acquire the knowledge and abilities necessary for their future professional endeavors.

Furthermore, AI supports the development of crucial 21st-century competencies such as problem-solving, critical thinking, and communication, which are imperative for future job markets. Through personalized learning trajectories crafted by AI, students achieve mastery in these areas, enhancing their adaptability and competitiveness (Zawacki-Richter et al., 2019).

AI can also enhance job preparedness by offering real-world problem-solving scenarios and interactive simulations, allowing students to practice and apply their knowledge in practical contexts. These experiences are crucial for building the competencies required in the workforce (Chen, Chen, & Lin, 2020).

Additionally, AI can streamline administrative tasks for educators, freeing up more time for student interaction and personalized feedback. This efficient use of resources ensures that students receive more focused and effective guidance, further improving their readiness for future careers (Luckin et al., 2016).

Overall, past research shows AI has the potential to equip students with the essential skills and experiences for success in today's dynamic job market. However, as AI continues to take on more instructional responsibilities, from delivering content to grading and feedback, it becomes increasingly important to understand how students perceive these changes. Their attitudes, preferences, and levels of trust toward AI in educational settings can directly influence engagement, satisfaction, and learning outcomes. Investigating students' perceptions of AI- versus human-designed courses can offer meaningful insights into what they value in their learning experience and help guide more effective and thoughtful integration of AI in higher education.

Role of AI in Examination and Assessment Process

The integration of AI in education has transformed student assessment. AI technology automates assessment practices, generating tasks, identifying suitable peers for grading, and automatically scoring student work (Swiecki et al., 2022). Systems like auto-graders evaluate written tasks and assignments in mathematics and computer sciences, scoring responses, diagnosing errors, and suggesting corrections (Holmes and Tuomi, 2022).

AI revolutionizes assessment by automating and expediting evaluations, delivering rapid, individualized feedback. Utilizing machine learning and natural language processing (NLP), AI can assess diverse types of student work, from multiple-choice questions to complex essays and spoken responses (González-Calatayud, Prendes-Espinosa, and Roig-Vila, 2021). This facilitates real-time feedback, which is crucial for learning.

AI-driven tools enhance grading accuracy and consistency, reducing educators' burdens and allowing focus on curriculum development and student engagement (Vittorini, Menini, and Tonelli, 2020). These tools provide objective evaluations, eliminating human bias and errors, and offer more in-depth feedback due to fewer time and resource constraints. High-quality feedback is essential for mastering material, as learning from mistakes is highly effective (Kamalov, Calonge, and Gurrib, 2023)

AI systems that continuously monitor and assess students can play a significant role in improving educational outcomes, especially when they combine quantitative and qualitative data to deliver personalized feedback and track performance over time. One example is an AI-powered platform that supports student diagnosis, assistance, and evaluation in engineering education, showing promising results in enhancing individualized learning and evaluation processes (Samarakou et al., 2016).

AI-based assessment tools have shown strong potential for enhancing learning, particularly in fields that rely on hands-on training. One example is a system that integrates virtual reality with AI to deliver automatic, real-time feedback based on performance metrics from simulations. By accurately classifying students by proficiency level and offering personalized guidance, the tool improved the training experience and achieved a 92% accuracy rate in student classification, demonstrating the effectiveness of AI-powered assessment in practice (Mirchi et al., 2020).

Not all experiences with AI-generated feedback are positive. In some cases, digital systems in educational settings have been associated with negative emotions among university students, such as feeling neglected, frustrated, uncertain, or uncomfortable, along with a strong need for validation. These findings, based on qualitative research using a story dialogue method, emphasize the importance of designing digital interfaces that support not just functionality, but also emotional well-being in learning environments (Saplacan et al., 2021).

These findings reveal that while AI-driven assessment tools can improve accuracy, efficiency, and personalized feedback, they also introduce challenges related to emotional well-being, trust, and user experience. As AI increasingly handles tasks such as grading, feedback delivery, and performance evaluation, functions traditionally performed by instructors, it is crucial to understand how students perceive this shift. Do they view AI-based assessments as fair, transparent, and supportive of learning, or do they prefer the human element for trust and emotional connection? Investigating these perceptions is essential for designing assessment systems that are both effective and accepted by learners. This study addresses this need by comparing students' views on AI-based and human-led assessment practices within online courses.

Students' Perceptions of AI Integration in Education

This study focuses on understanding students' perceptions of online courses that are designed and managed either by AI or by human instructors, with the goal of comparing how they evaluate key aspects such as instruction quality, assessment fairness and quality, engagement, and career relevance. Viewing students as active participants and co-creators in the service-dominant logic approach, they should be central to the value-creation process (Bowden, 2011). Understanding student-service relationships is crucial for creating value in education. Since AI can significantly impact student experiences (Barrett et al., 2019), a better understanding of students' needs is critical for this study and can be considered a form of market research to facilitate effective AI implementation in education (Djokic et al., 2024).

Several studies have explored how students perceive AI in education, offering valuable insights into its application:

Pratma, Sampelolo, and Lura (2023) studied the impact of AI on personalized learning in Indonesian higher education, using questionnaires, interviews, observations, and documentation with 29 educational technology students. The findings revealed that 88% of students find AI important for learning, and 74% see it as useful for independent study. Additionally, 88% believe AI can serve as a virtual tutor or smart assistant, but only 20% think it can replace teachers, with 80% disagreeing. Students value AI for personalized feedback, identifying learning styles, and providing targeted support, but emphasize the need for human interaction. The study concludes that AI can significantly enhance learning but cannot replace the vital role of teachers in offering moral guidance and personal connections.

Kumar and Raman (2022) conducted a study in India on students' perceptions of AI in higher education, involving 662 business management students in a structured survey. The results showed that 77.5% of students favor using AI in academic settings, with 70.7% supporting its use in teaching and learning and 74.5% in academic administration due to its potential to enhance efficiency and offer personalized learning experiences. However, concerns were noted regarding its use in examinations (33%), placements (33.9%), and admissions (33.9%), with doubts about AI's accuracy and reliability in these areas. Students emphasized the importance of a balanced approach, combining AI with human oversight to ensure accuracy and reliability in critical academic tasks. While AI is viewed positively for teaching and administration, careful integration is needed to address concerns in other areas.

Farida and Makbul (2024) studied Indonesian undergraduate students' perceptions of AI in education. The qualitative research revealed that 70% of students find AI beneficial for enhancing learning through efficient resource access. However, concerns were raised about dependency, reduced critical thinking, and increased laziness due to excessive AI use. Students emphasized the need for human interaction, noting that AI cannot replace the emotional support and connections provided by teachers. AI was praised for quick information retrieval, supporting self-directed learning, and boosting productivity in academic tasks. Semi-structured interviews with 18 students showed generally positive perceptions of AI's role in education but highlighted the importance of integrating AI without compromising human elements.

The study by Djokic et al. (2024) surveyed 285 students on their perceptions of AI in education. Positive views were shaped by AI's ability to address traditional educational weaknesses, like sentiment analysis, personalized learning, and performance prediction. However, concerns about privacy and control in classroom monitoring and student evaluation contributed to negative perceptions. The study underscores the importance of integrating AI in ways that address privacy concerns while enhancing education quality and personalization.

Fietta et al. (2022) conducted an experimental study to examine the difference between users' explicit and implicit attitudes towards AI. The study involved 829 participants who completed self-report measures for explicit attitudes and an Implicit Association Test (IAT) for implicit attitudes. The results showed that while most participants explicitly expressed positive attitudes toward AI, their implicit responses were often negative or neutral. Additionally, women generally had more negative attitudes towards AI than men, and those working in the AI field had more positive attitudes. These findings highlight the need to consider both explicit and implicit attitudes when evaluating public perceptions of AI, as significant differences can exist between them.

Idroes et al. (2023) surveyed undergraduate students' perceptions of AI in education, revealing a generally positive view of AI's usefulness. Students appreciated the constant feedback from AI systems during evaluations but noted the lack of personal relationships with teachers as a significant drawback to effective learning.

Lastly, some research has focused on medical students' perspectives on AI. Studies by Santomartino and Yi (2022) and Pinto dos Santos et al. (2019) revealed that medical students generally have a positive view of AI, recognizing its potential to enhance learning and clinical decision-making.

While these studies offer important insights into students' general attitudes toward AI in education, most focus on broad perceptions or specific functions like tutoring, feedback, or resource access. Few studies directly compare how students perceive entire courses designed and managed by AI versus those designed and managed by human instructors, particularly in the context of online learning. Moreover, students' evaluations of key dimensions such as instructional quality, grading fairness, engagement, and job market relevance remain underexplored.

With rapid advancements in AI and its growing presence in educational technologies, fully AI-designed and managed courses are no longer a far-off idea, they represent a real possibility and opportunity for the future of higher education. Understanding how students perceive this shift is essential for ensuring the effective, ethical, and student-centered integration of AI in course design and delivery. This study aims to fill that gap by systematically comparing students' perceptions of AI- and human-designed online courses across multiple aspects of the learning experience.

METHODOLOGY

To explore students' perceptions of AI- versus human-designed online courses, we conducted a structured online survey consisting of three core sections. Each section focused on a key aspect of course design and delivery: Instructional Quality and Engagement, Assessment and Feedback, and Career Relevance and Job Preparedness. Participants were asked to directly compare an online course designed and managed entirely by AI with one led entirely by human instructors across these dimensions.

In addition to the core comparison sections, the survey included a range of background and contextual questions designed to better understand participants' educational experiences and familiarity with technology.

Respondents were asked to provide demographic information such as age, gender, level of study, and academic discipline. To ensure relevance, the survey included a screening item confirming whether participants had prior experience with online courses.

An additional question assessed their self-reported understanding of AI tools and technology. This helped contextualize the core findings by offering insight into how participants' backgrounds and technological familiarity might influence their perceptions of AI-designed versus human-designed courses.

Variable Construction and Item Development

The core questionnaire included three thematic categories designed to capture students' comparative evaluations of online courses designed and managed by AI versus those led by human instructors. Each category assessed a distinct dimension of the learning experience:

Instructional Quality and Engagement: This category measured students' perceptions of instructional effectiveness, including the clarity and conciseness of explanations, the course's ability to inspire goal-setting, adaptability to learning styles, engagement, and the overall management and delivery of the course content.

Assessment and Feedback: This section focused on students' evaluations of the assessment process. It examined perceptions of grading accuracy, fairness, and transparency, as well as the usefulness and timeliness of feedback provided by either AI or human instructors.

Career Relevance and Job Preparedness: This category assessed how well students believed each course type prepared them for the job market. It included items related to recommending relevant course material, updating content to reflect industry trends, designing realistic learning activities, and integrating practical job-related skills.

Each category was designed to compare student attitudes across key functions of course design and delivery, providing a comprehensive view of how AI- and human-managed courses are perceived in terms of educational value and relevance.

The items used to measure the three key variables, Course Quality, Grading and Assessment, and Future Job Preparedness, were adapted from prior validated instruments in the literature. Specifically, item development was guided by relevant constructs identified in studies by Cheng et al. (2023) and Djokic et al. (2024) (see Appendix 2). These sources informed the selection and framing of questionnaire items to ensure content validity and alignment with established research on AI in education.

The questionnaire items were developed using a combination of established literature and standardized instruments. Core variables, Course Quality, Grading and Assessment, and Future Job Preparedness, were informed by studies such as Cheng et al. (2023) and Djokic et al. (2024) (see Appendix 2), which provided theoretical grounding for each dimension. Additionally, selected items were adapted from the IDEA Student Ratings of Instruction system, a widely used and validated scale for course evaluation. Incorporating the IDEA scale allowed for alignment with recognized instructional assessment criteria and strengthened the questionnaire's relevance to real-world academic settings.

Table 1 provides an overview of the three main questionnaire categories, including the corresponding question numbers, the focus of measurement for each category, and key items used to assess students' perceptions of AI- versus human-designed online courses.

Category	Focus of Measurement	Key Items
Instructional Quality and Engagement	Perceptions of instructional effectiveness and engagement in AI- vs. human-designed courses	-Explaining course material clearly and concisely -Inspiring students to set and achieve their goals -Adapting course content to match students' learning styles -Ability to keep students engaged with the course -Introducing stimulating ideas about the subject -Managing and delivering an entire course effectively
Assessment and Feedback	Perceptions of grading practices and quality of feedback	-Grading assignments and exams quickly and accurately -Fair and unbiased grading -Making fewer errors in grading -Transparency in grading -Providing constructive feedback to students work -Providing timely feedback to assignments and exams
Career Relevance and Job Preparedness	Perceptions about how well the course prepares them for future employment	-Recommend course material based on students' career goals -Updating course content to match evolving industry demands -Designing learning activities that replicate real business environments -Integrating practical skills needed in the job market into the course -Preparing students for real-world jobs

Table 1:Summary of Questionnaire Categories and Measured Constructs

Data Collection and Sample Summary

Data for this study were collected through two recruitment channels: Prolific, a crowdsourcing platform for academic research, and direct outreach to undergraduate and graduate students at a public university in the southern United States. All participants were located in the United States and had at least some college education. By combining responses from university students with a broader national sample, this methodology provides both contextual richness and broader generalizability in assessing students' attitudes toward the expanding role of AI in course design and delivery.

To ensure relevance to the study's focus, a screening question was included to confirm whether participants had prior experience taking online courses and to measure their experience with online courses. Based on this criterion, 224 respondents qualified and were retained for analysis.

The survey sample included participants with diverse backgrounds in terms of gender, education level, age, and area of study. Of the valid responses, 50.9% of participants identified as male, 47.7% as female, and 1.4% as non-binary or third gender.

Educationally, the sample was nearly evenly split, with 50.9% being undergraduate students and 49.1% graduate students. Regarding academic disciplines, the most represented fields were Business & Economics (37.1%), Engineering & Technology (19.2%), and Education (8.9%). Other areas of study included Health Sciences & Medicine (10.3%), Social & Behavioral Sciences (6.3%), Arts & Humanities (4.5%), Law/Public Policy/Criminal Justice (4.0%), Natural Sciences & Mathematics (3.6%), and Undecided/General Studies (0.9%), with 5.4% selecting “Other” or preferring not to disclose their field.

Respondents spanned a range of age groups, with the majority falling between 25 and 44 years old (29.8% aged 25–34 and 28.0% aged 35–44), followed by 16.5% aged 45–54, 12.8% aged 18–24, 7.8% aged 55–64, and 5.0% aged 65 or older.

Table 2 shows summary of demographic information of the respondents.

Demographic Variable	Category	Valid Percent (%)
Gender	Male	50.9
	Female	47.7
	Non-binary / Third gender	1.4
Level of Study	Undergraduate	50.9
	Graduate	49.1
Age	18–24	12.8
	25–34	29.8
	35–44	28.0
	45–54	16.5
	55–64	7.8
	65 or older	5.0
Area of Study	Business & Economics	37.1
	Engineering & Technology	19.2
	Education	8.9
	Health Sciences & Medicine	10.3
	Social & Behavioral Sciences	6.3
	Arts & Humanities	4.5
	Law, Public Policy & Criminal Justice	4.0
	Natural Sciences & Mathematics	3.6
	Undecided / General Studies	0.9
	Other / Prefer not to say	5.4

Table 2: Summary of Participants’ Demographics

Participants were also asked to evaluate their understanding of AI tools and technology, a factor relevant to their ability to assess AI-managed educational experiences. 43.5% of participants identified as proficient, noting they understand most concepts and can use AI tools effectively. Another 31.4% rated themselves as having an

intermediate level of knowledge, while 13.9% considered themselves advanced users. Only a small portion identified as beginners (10.3%), and less than 1% reported no understanding or experience with AI.

How would you rate your understanding of AI tools and technology?	Percent
Advanced: I have a deep understanding and can explain how AI works	13.7
Proficient: I understand most concepts and can use AI tools effectively	42.9
Intermediate: I have a basic understanding and can use some AI tools	31.4
Beginner: I have limited knowledge and have only used AI tools a few times	11.1
Novice: I have no understanding or experience with AI technology	0.9

Table 3: Participants' Self-reported level of AI proficiency

Reliability Test for Survey Instrument

All three scales used to measure students' perceptions of AI- versus human-designed online courses demonstrated strong internal consistency. The Instructional Quality and Engagement scale (6 items) yielded a Cronbach's alpha of .875, indicating high reliability. Similarly, the Assessment and Feedback scale (6 items) showed a Cronbach's alpha of .870, reflecting a strong level of consistency across items evaluating grading practices and feedback quality. The Career Relevance and Job Preparedness scale (5 items) also demonstrated strong internal reliability, with a Cronbach's alpha of .875. These results confirm that the items within each scale reliably measure coherent constructs relevant to the study's objectives. (Tavakol & Dennick, 2011)

Scale	Number of Items	Cronbach's Alpha (α)
Instructional Quality and Engagement	6	.875
Assessment and Feedback	6	.870
Career Relevance and Job Preparedness	5	.875

Table 4: Reliability of Survey Scales

Results: Perceptions of AI- vs Human Designed Online Courses

Instructional Quality and Engagement

Based on a one-sample t-test comparing participants' responses against the neutral midpoint (4 = "both perform about the same"), the results suggest that participants generally perceive human-designed courses more favorably than AI-designed ones across all measured dimensions of instructional quality. The strongest effect was observed in the ability to inspire students to set and achieve goals, with a mean of 5.66 ($t = 16.87$, $p < .001$), indicating a clear preference for human instructors in this area. Similarly, participants believed humans were significantly better at keeping students engaged ($M = 5.03$, $t = 9.04$, $p < .001$) and introducing stimulating ideas ($M = 4.62$, $t = 5.31$, $p < .001$).

Although the differences were less pronounced, participants also rated human instructors slightly better in explaining course materials ($M = 4.30$, $t = 2.52$, $p = .006$), adapting content to learning styles ($M = 4.36$, $t = 2.94$, $p = .004$), and managing course delivery ($M = 4.39$, $t = 3.19$, $p = .002$). These findings indicate that while students may acknowledge some potential for AI in instructional tasks, they continue to value the human element in aspects of teaching that require motivation, creativity, and engagement.

These results have important implications for higher education institutions considering the integration of AI into course design and delivery. While AI may serve as a useful supplement, especially in technical or standardized content delivery, human instructors remain critical for fostering deeper student engagement, motivation, and the development of higher-order thinking.

Dimension	Mean	t	p-value	95% CI
Explaining course material clearly and concisely	4.30	2.518	.006	0.06, 0.53
Inspiring students to set and achieve their goals	5.66	16.871	< .001	1.46, 1.85
Adapting content to students' learning styles	4.36	2.937	.004	0.12, 0.61
Keeping students engaged	5.03	9.035	< .001	0.81, 1.26
Introducing stimulating ideas about the subject	4.62	5.307	< .001	0.39, 0.85
Managing and delivering an entire course effectively	4.39	3.190	.002	0.15, 0.63

Table 5: One-Sample t-Test Results for Perceived Instructional Quality and Engagement Dimension

Assessment and Feedback

According to the one-sample t-test results comparing responses to the midpoint value of 4 (“both perform about the same”), students showed a clear preference for AI over human instructors on several dimensions related to grading and assessment. Specifically, AI was rated significantly better in grading assignments and exams quickly and accurately ($M = 3.22$, $t = -6.36$, $p < .001$), fairness and unbiased grading ($M = 3.09$, $t = -7.74$, $p < .001$), making fewer grading errors ($M = 3.29$, $t = -6.10$, $p < .001$), transparency in grading ($M = 3.56$, $t = -3.48$, $p < .001$), and providing timely feedback ($M = 3.49$, $t = -4.01$, $p < .001$). In each case, the mean rating was significantly below 4, indicating that students believe AI outperforms humans in these specific grading functions.

However, when it came to providing constructive feedback, participants showed a strong preference for human instructors. The mean score for this item was significantly higher than the neutral point ($M = 4.78$, $t = 6.50$, $p < .001$), suggesting that students view human feedback as more meaningful or effective in guiding learning. Taken together, these results imply that while students recognize the strengths of AI in speed, consistency, and perceived fairness, they still rely on human instructors for deeper, more nuanced interactions, especially when it comes to formative assessment and personalized guidance. These insights suggest a complementary role for AI in higher education assessment, rather than a full replacement of human involvement.

Dimension	Mean	t	p-value	95% CI
Grading assignments & exams quickly and accurately	3.22	-6.364	< .001	-1.02, -0.54
Fair and unbiased grading	3.09	-7.739	< .001	-1.14, -0.68
Making fewer errors in grading	3.29	-6.099	< .001	-0.93, -0.48
Transparency in grading	3.56	-3.481	< .001	-0.69, -0.19
Providing constructive feedback	4.78	6.503	< .001	0.54, 1.01
Providing timely feedback	3.49	-4.011	< .001	-0.76, -0.26

Table 6: One-Sample t-Test Results for Perceived Assessment and Feedback Dimensions

Career Relevance and Job Preparedness

Participants did not express a clear preference for either AI or human instructors when it came to recommending course material based on students' career goals ($M = 3.99$, $t = -0.08$, $p = .94$). However, for updating course content to match evolving industry demands, the mean response ($M = 3.73$, $t = -2.3$, $p = .021$) was significantly lower than 4, indicating a slight preference for AI in this area.

On the other hand, participants favored human instructors on dimensions that involved more hands-on preparation. They rated human-designed courses as significantly better at designing learning activities that replicate real business environments ($M = 4.37$, $t = 3.15$, $p = .002$), integrating practical job-market skills ($M = 4.72$, $t = 6.47$, $p < .001$), and preparing students for real-world employment ($M = 5.09$, $t = 10.11$, $p < .001$). These findings suggest that while AI may be seen as more adaptive to changing content needs, human instructors are perceived as stronger in facilitating applied learning and real-world readiness.

These results point to a nuanced student perspective on the capabilities of AI versus human instructors. Students consistently preferred human instructors in areas that require interpersonal connection, creativity, and mentorship. These include motivating students, fostering engagement, and preparing them for real-world careers. On the other hand, when it came to more standardized, objective, and efficiency-driven tasks such as grading speed, fairness, and accuracy, students perceived AI as more competent.

This pattern underscores the emerging role of AI not as a substitute for human educators but as a complementary tool within higher education. AI may enhance administrative efficiency and offer scalable solutions for assessment and content adaptation. However, the perceived irreplaceable value of human instructors in fostering engagement, providing nuanced feedback, and supporting career readiness highlights the continued need for human presence in educational environments. These insights can help guide institutions as they consider integrating AI tools in ways that amplify, rather than replace, human expertise.

Dimension	Mean	t	p-value	95% CI
Recommend course material based on students' career goals	3.99	-0.076	.940	-0.24, 0.22

Updating course content to match evolving industry demands	3.73	-2.320	.021	-0.50, -0.04
Designing learning activities that replicate real business environments	4.37	3.148	.002	0.14, 0.61
Integrating practical skills needed in the job market into the course	4.72	6.465	<.001	0.50, 0.95
Preparing students for real-world jobs	5.09	10.113	<.001	0.88, 1.31

Table 7: One-Sample t-Test Results for Perceived Career Relevance and Job Preparedness

Differences Across AI Proficiency Levels

To examine how students' perceptions of AI- versus human-designed courses differ by their understanding of AI tools and technologies, we conducted a series of one-way ANOVA tests across all survey items. Participants self-identified their AI proficiency as one of five categories: Advanced, Proficient, Intermediate, Beginner, or Novice.

The results revealed statistically significant group differences on several items. Notably, individuals with lower levels of AI proficiency (e.g., Beginner or Intermediate) consistently expressed a stronger preference for human-designed courses compared to those who reported higher AI proficiency. This trend suggests that individuals who are less familiar with AI may place more trust in human instructors than AI, particularly when it comes to communication, engagement, feedback, and career preparation.

For example, there was a significant difference in perceptions of how clearly course material is explained, $F(4, 219) = 5.2, p < .001$. Post hoc tests revealed that individuals in the Intermediate and Beginner groups expressed a stronger preference for human instructors compared to individuals in Advanced group. A similar pattern was observed for inspiration and motivation, $F(4, 219) = 4.14, p = .003$, Ability to keep students engaged with the course, $F(4, 219) = 3.59, p = .007$, Introducing stimulating ideas about the subject, $F(4, 219) = 3.66, p = .007$, and managing the overall course delivery, $F(4, 219) = 3.74, p = .006$. In terms of assessment and feedback, individuals with less AI experience were significantly more likely to prefer human instructors for providing constructive feedback, $F(4, 219) = 3.55, p = .008$. This finding underscores a perceived limitation of AI in offering personalized and developmental feedback. Career readiness items also showed notable differences. Participants with lower AI proficiency were more likely to believe that human-designed courses better prepare students for real-world jobs ($F(4, 219) = 3.19, p = .014$) and more effectively integrate practical skills needed in the job market ($F(4, 219) = 4.18, p = .003$). This implies a gap in perceived credibility of AI systems when it comes to high-stakes, applied learning outcomes. Detailed reports of the ANOVA results and post hoc comparisons are available in appendix A.

Dimension	F	P-value	Implication
Explaining course material clearly and concisely	5.19 9	< .001	Less knowledgeable users more strongly favor human instructors for clarity
Inspiring students to set and achieve their goals	4.14 1	.003	Those with lower AI experience see humans as more inspiring
Ability to keep students engaged with the course	3.59 4	.007	Those with lower AI experience see humans as more able to engage students

Introducing stimulating ideas about the subject	3.66 1	.007	Human instructors viewed as more intellectually stimulating by less AI experienced users
Managing and delivering an entire course effectively	3.73 9	.006	Users with lower AI experience more confident in humans' ability to manage courses
Providing constructive feedback to students' work	3.54 5	.008	Preference for human feedback increases with lower AI expertise
Updating course content to match evolving industry demands	3.00 4	.019	Humans perceived as better at maintaining industry relevance, especially by less AI-savvy participants
Integrating practical skills needed in the job market into the course	4.18 0	.003	Lower AI users trust human instructors more for career-related learning
Preparing students for real-world jobs	3.18 6	.014	Stronger belief in human preparedness among less AI-experienced students

Table 8: Differences Across Levels of AI Proficiency

These findings suggest that individuals with less AI experience exhibit a stronger preference for human-designed online courses, particularly in areas involving motivation, engagement, intellectual stimulation, feedback, and job readiness. In contrast, students with more advanced AI knowledge may be more receptive to the potential of AI-designed courses, possibly due to greater familiarity with the technology and its capabilities. These differences highlight the importance of considering students' technological literacy when integrating AI into educational design.

Differences Across Demographic Groups

The results showed no statistically significant differences in students' evaluations of AI- versus human-designed courses across key demographic variables. Specifically, age, gender, and level of education were not associated with meaningful variation in how participants rated instructional quality, feedback, or career preparation.

Age: Across different age groups, participants reported generally similar perceptions of AI- and human-designed courses. One-way ANOVA tests revealed no statistically significant differences in any of the survey dimensions, including instructional quality, assessment and feedback, or job preparedness. This suggests that attitudes toward AI involvement in course design are not meaningfully shaped by generational differences.

	Sum of Squares	df	Mean Square	F	p-value
Explaining course material clearly and concisely	2.589	5	.518	.166	.975
Inspiring students to set and achieve their goals	14.078	5	2.816	1.273	.277
Adapting course content to match students' learning styles	21.906	5	4.381	1.250	.288
Ability to keep students engaged with the course	3.051	5	.610	.197	.963
Introducing stimulating ideas about the subject	26.184	5	5.237	1.695	.138
Managing and delivering an entire course effectively	2.761	5	.552	.162	.976
Grading assignments and exams quickly and accurately	16.253	5	3.251	.968	.439
Fair and unbiased grading	10.361	5	2.072	.686	.634
Making fewer errors in grading	20.763	5	4.153	1.444	.211
Transparency in grading	7.478	5	1.496	.429	.828

Providing constructive feedback to students' work	7.926	5	1.585	.480	.791
Providing timely feedback to assignments and exams	17.892	5	3.578	1.032	.400
Recommend course material based on students' career goals	9.372	5	1.874	.600	.700
Updating course content to match evolving industry demands	26.734	5	5.347	1.819	.111
Designing learning activities that replicate real business environments	24.894	5	4.979	1.573	.170
Integrating practical skills needed in the job market into the course	25.270	5	5.054	1.766	.122
Preparing students for real-world jobs	15.730	5	3.146	1.215	.304

Table 9: ANOVA Results; Difference Across Age Groups

Gender: The results revealed no statistically significant differences across genders for most of the evaluated instructional, grading, and job-preparedness dimensions. That is, participants identifying as male, female, or other genders reported broadly similar views regarding the comparative effectiveness of AI and human instructors in aspects such as course clarity, engagement, feedback, and job preparation. The only exception was the item related to “Updating course content to match evolving industry demands,” where a significant difference was observed across gender groups, $F(2, 219) = 3.33$, $p = .038$. Post hoc pairwise comparisons show that female respondents perceive human instructors to be better in updating course content to match evolving industry demands.

Dimension	Sum of Squares	d f	Mean Square	F	P-value
Explaining course material clearly and concisely	1.609	2	.805	.252	.778
Inspiring students to set and achieve their goals	2.822	2	1.411	.644	.526
Adapting course content to match students' learning styles	4.085	2	2.042	.592	.554
Ability to keep students engaged with the course	4.135	2	2.068	.706	.495
Introducing stimulating ideas about the subject	1.633	2	.816	.265	.767
Managing and delivering an entire course effectively	7.751	2	3.875	1.146	.320
Grading assignments and exams quickly and accurately	18.098	2	9.049	2.728	.068
Fair and unbiased grading	14.800	2	7.400	2.434	.090
Making fewer errors in grading	3.385	2	1.692	.555	.575
Transparency in grading	15.477	2	7.738	2.210	.112
Providing constructive feedback to students' work	9.281	2	4.640	1.445	.238
Providing timely feedback to assignments and exams	8.281	2	4.141	1.145	.320
Recommend course material based on students' career goals	3.134	2	1.567	.509	.602
Updating course content to match evolving industry demands	19.387	2	9.694	3.325	.038

Designing learning activities that replicate real business environments	6.035	2	3.017	.965	.383
Integrating practical skills needed in the job market into the course	5.989	2	2.994	1.054	.350
Preparing students for real-world jobs	1.541	2	.771	.289	.749

Table 10: ANOVA Results; Differences Across Genders

	Mean Difference	Std. Error	p-value	95% Confidence Interval	
				Lower Bound	Upper Bound
Male Vs Female	-.554*	.231	.017	-1.01	-.10
Male vs Non-binary / third gender	-1.202	.999	.230	-3.17	.77

Table 11: Post Hoc Comparisons; Difference Across Gender. Survey Item: Updating course content to match evolving industry demands

Level of education: Participants across different levels of education did not differ significantly in their perceptions of AI- versus human-designed courses. Independent-samples t-test results comparing responses from students with undergraduate versus graduate-level education revealed no statistically significant differences in mean scores across any of the survey items. This suggests that educational attainment does not meaningfully shape students' preferences for human or AI instructors in online learning environments.

Dimension	Mean Undergraduate	Mean Graduate	t	df	P-value
Explaining course material clearly and concisely	4.47	4.16	-1.294	217	.197
Inspiring students to set and achieve their goals	5.61	5.70	.454	217	.651
Adapting course content to match students' learning styles	4.34	4.41	.257	217	.797
Ability to keep students engaged with the course	5.25	4.81	-1.866	216	.063
Introducing stimulating ideas about the subject	4.75	4.54	-.883	217	.378
Managing and delivering an entire course effectively	4.53	4.27	-1.050	217	.295
Grading assignments and exams quickly and accurately	3.26	3.16	-.416	217	.678
Fair and unbiased grading	2.89	3.32	-1.796	216	.074
Making fewer errors in grading	3.43	3.18	-1.081	217	.281

Transparency in grading	3.79	3.35	- 1.71 4	21 6	.088
Providing constructive feedback to students' work	4.90	4.67	-.964	21 7	.336
Providing timely feedback to assignments and exams	3.36	3.57	-.805	21 7	.422
Recommend course material based on students' career goals	3.85	4.12	- 1.10 9	21 7	.268
Updating course content to match evolving industry demands	3.90	3.59	- 1.31 0	21 6	.192
Designing learning activities that replicate real business environments	4.43	4.32	-.453	21 5	.651
Integrating practical skills needed in the job market into the course	4.72	4.73	.047	21 7	.963
Preparing students for real-world jobs	5.17	4.99	-.819	21 7	.414

Table 12: T-Test Results; Differences Across Levels of Education

Overall, the analysis revealed that demographic factors such as age, gender, and level of education did not significantly influence students' perceptions of AI- versus human-designed courses. Across all three demographic variables, participants expressed similar levels of preference for human instructors, particularly in areas related to engagement, feedback, and career relevance. These findings suggest that attitudes toward instructional design may be shaped more by experiential or psychological factors such as AI proficiency than by demographic characteristics alone.

Conclusion

As artificial intelligence becomes more embedded in educational environments, understanding how individuals perceive AI-designed versus human-designed online courses is critical. This study revealed that individuals consistently favor human instructors, particularly in areas involving engagement, feedback, and career preparedness. While AI is acknowledged for its efficiency and consistency, especially in grading, participants still place high value on the relational, adaptive, and experiential elements that human educators provide. Preferences were significantly influenced by individuals' AI proficiency, but not by demographic variables such as age, gender, or education level. These findings suggest that while AI may enhance certain instructional functions, its role is unlikely to fully replace the perceived strengths of human instructors. For institutions seeking to integrate AI into course design, it is essential to strike a balance between technological innovation and human-centered pedagogy. Future research should explore how blended approaches can best serve diverse learner populations.

References

- Akgun, S., & Greenhow, C. (2021). Artificial Intelligence in Education: Addressing Ethical Challenges in K-12 Settings. *AI and Ethics*, 1-10.
- Algahtani, A. (2024). A Comparative Study Of AI-Based Educational Tools: Evaluating User Interface Experience and Educational Impact. [online] 102(5). Available at: <https://www.jatit.org/volumes/Vol102No5/7Vol102No5.pdf> [Accessed 24 Jun. 2024].

- Almasri, F. (2024). Exploring the Impact of Artificial Intelligence in Teaching and Learning of Science: A Systematic Review of Empirical Research. *Research in science education*. doi:<https://doi.org/10.1007/s11165-024-10176-3>.
- Baker, R. and Siemens, G., (2014). Learning analytics and educational data mining. *Cambridge Handbook of the Learning Sciences*, pp.253-272
- Banditvilai C. (2016), “Enhancing Students’ Language Skills through Blended Learning” *The Electronic Journal of e-Learning*, Vol. 14 No. 3, pp.220-229.
- Barret, M., Branson, L., Carter, S., DeLeon, F., Ellis, J., Gundlach, C. and Lee, D. (2019). Using Artificial Intelligence to Enhance Educational Opportunities and Student Services in Higher Education. *Inquiry*, [online] 22(1). Available at: <https://eric.ed.gov/?id=EJ1224780> [Accessed 8 Jul. 2020].
- Bedenlier, S., Bond, M., Buntins, K., Zawacki-Richter, O. and Kerres, M. (2020). Facilitating student engagement through educational technology in higher education: A systematic review in the field of arts and humanities. *Australasian Journal of Educational Technology*, 36(4), pp.126–150. doi: <https://doi.org/10.14742/ajet.5477>
- Bowden, J.L.-H. (2011). Engaging the Student as a Customer: A Relationship Marketing Approach. *Marketing Education Review*, 21(3), pp.211–228. doi:<https://doi.org/10.2753/mer1052-8008210302>.
- Brusilovsky, P. (2012). *Adaptive Hypermedia for Education and Training*. Adaptive Technologies for Training and Education. Cambridge: Cambridge University Press.
- Chaudhry, M.A. and Kazim, E. (2021). Artificial Intelligence in Education (AIEd): a high-level academic and industry note 2021. *AI and Ethics*, 2(2). doi:<https://doi.org/10.1007/s43681-021-00074-z>.
- Chen, L., Chen, P. and Lin, Z. (2020). Artificial Intelligence in Education: a Review. *IEEE Access*, [online] 8, pp.75264–75278. doi:<https://doi.org/10.1109/ACCESS.2020.2988510>.
- Cheng, X., Su, L., Luo, X., Benitez, J., & Cai, S. (2022). The Good, the Bad, and the Ugly: Impact of Analytics and Artificial Intelligence-Enabled Personal Information Collection on Privacy and Participation in Ridesharing. *European Journal of Information Systems*, 31(3), 339-363.
- Conklin, T.A. (2016). Knewton (An adaptive learning platform available at <https://www.knewton.com/>) Knewton (An adaptive learning platform available at <https://www.knewton.com/>). *Academy of Management Learning & Education*, 15(3), pp.635–639. doi:<https://doi.org/10.5465/amle.2016.0206>.
- Coppin, B. (2004) *Artificial Intelligence Illuminated*. Boston, MA, USA: Jones and Bartlett.
- Craig, S.D., Hu, X., Graesser, A.C., Bargagliotti, A.E., Sterbinsky, A., Cheney, K.R. and Okwumabua, T. (2013). The impact of a technology-based mathematics after-school program using ALEKS on student’s knowledge and behaviors. *Computers & Education*, 68, pp.495–504. doi:<https://doi.org/10.1016/j.compedu.2013.06.010>.
- Cui, W., Xue, Z., & Thai, K. P. (2019). Performance Comparison of an AI-Based Adaptive Learning System in China. *Proceedings 2018 Chinese Automation Congress, CAC 2018*.
- Farida, N.A. and Makbul, M. (2024). Students’ Perception on Artificial Intelligence Use in Learning Process (Case Study of PAI Students at Singaperbangsa University Karawang). *Proceeding International Conference on Religion, Science and Education*, [online] 3, pp.331–335. Available at: <https://sunankalijaga.org/prosiding/index.php/icrse/article/view/1253> [Accessed 16 Apr. 2024].
- Fietta, V., Zecchinato, F., Stasi, B.D., Polato, M. and Monaro, M. (2021). Dissociation Between Users’ Explicit and Implicit Attitudes Toward Artificial Intelligence: An Experimental Study. *IEEE Transactions on Human-Machine Systems*, pp.1–9. doi:<https://doi.org/10.1109/thms.2021.3125280>.

- Ghazi Mauer Idroes, Teuku Rizky Noviandy, Arif Maulana, Irvanizam Irvanizam, Jalil, Z., Lensoni Lensoni, Lala, A., Abdul Hawil Abas, Trina Ekawati Tallei and Rinaldi Idroes (2023). Student Perspectives on the Role of Artificial Intelligence in Education: A Survey-Based Analysis. *Journal of Educational Management and Learning*, 1(1), pp.8–15. doi:<https://doi.org/10.60084/jeml.v1i1.58>.
- González-Calatayud, V., Prendes-Espinosa, P. and Roig-Vila, R. (2021). Artificial Intelligence for Student Assessment: A Systematic Review. *Applied Sciences*, 11(12), p.5467. doi:<https://doi.org/10.3390/app11125467>.
- Gransden, C., Hindmarsh, M., Lê, N.C. and Nguyen, T.H. (2024) 'Adaptive learning through technology: a technical review and implementation', *Higher Education, Skills and Work-Based Learning*, 14(2), pp. 409-417
- Holmes, W. and Tuomi, I. (2022). State of the art and practice in AI in education. *European Journal of Education*, [online] 57(4), pp.542–570. doi:<https://doi.org/10.1111/ejed.12533>.
- Holmes, W., Bialik, M. and Fadel, C. (2019) *Artificial Intelligence in Education: Promises and Implications for Teaching and Learning*. Boston: Center for Curriculum Redesign.
- Hwang, G.-J., Xie, H., Wah, B. and Gašević, D. (2020). Vision, challenges, roles and research issues of Artificial Intelligence in Education. *Computers and Education: Artificial Intelligence*, [online] 1(1), p.100001. doi:<https://doi.org/10.1016/j.caeai.2020.100001>.
- Johnson, L., Adams Becker, S., Estrada, V. and Freeman, A. (2015) *NMC Horizon Report: 2015 Higher Education Edition*. Austin, Texas: The New Media Consortium.
- Jordan, S. (2016). E-assessment: Past, present, and future. *New Directions in the Teaching of Physical Sciences*, (9), pp.87–106. Doi :<https://doi.org/10.29311/ndtps.v0i9.504>.
- Kabudi, T., Pappas, I. and Olsen, D.H. (2021). AI-enabled Adaptive Learning Systems: A Systematic Mapping of the Literature. *Computers and Education: Artificial Intelligence*, [online] 2, p.100017. doi:<https://doi.org/10.1016/j.caeai.2021.100017>.
- Kamalov, F., Calonge, D.S. and Gurrib, I. (2023). New Era of Artificial Intelligence in Education: Towards a Sustainable Multifaceted Revolution. *Sustainability*, [online] 15(16), p.12451. doi:<https://doi.org/10.3390/su151612451>.
- Korableva, O., Durand, T., Kalimullina, O. and Stepanova, I. (2019). Studying User Satisfaction with the MOOC Platform Interfaces Using the Example of Coursera and Open Education Platforms. *Proceedings of the 2019 International Conference on Big Data and Education - ICBDE'19*. doi:<https://doi.org/10.1145/3322134.3322139>.
- Luckin, R., Holmes, W., Griffiths, M. and Forcier, L.B. (2016) *Intelligence Unleashed: An Argument for AI in Education*. London: Pearson.
- Maslej, N., Fattorini, L., Brynjolfsson, E., Etchemendy, J., Ligett, K., Lyons, T., Manyika, J., Ngo, H., Niebles, J.C., & Parli, V. (2023). *The AI Index 2023 Annual Report*. AI Index Steering Committee, Institute for Human-Centered AI, Stanford University, Stanford, CA, USA.
- Memarian, B. and Doleck, T. (2023). Fairness, Accountability, Transparency, and Ethics (FATE) in Artificial Intelligence (AI) and higher education: A systematic review. *Computers and Education: Artificial Intelligence*, [online] 5(5), p.100152. doi:<https://doi.org/10.1016/j.caeai.2023.100152>.
- Miao, F., Holmes, W., Huang, R. and Zhang, H. (2021). *AI and education: A guidance for policymakers*. UNESCO Publishing.

- Mirchi, N., Bissonnette, V., Yilmaz, R., Ledwos, N., Winkler-Schwartz, A. and Del Maestro, R.F. (2020). The Virtual Operative Assistant: An explainable artificial intelligence tool for simulation-based training in surgery and medicine. *PLOS ONE*, 15(2), p.e0229596. doi:<https://doi.org/10.1371/journal.pone.0229596>.
- Murray, T., Blessing, S.B. and Ainsworth, S. (2003). *Authoring Tools for Advanced Technology Learning Environments*. Springer eBooks. Springer Nature. doi:<https://doi.org/10.1007/978-94-017-0819-7>.
- Owoc, M. L., Sawicka, A., & Weichbroth, P. (2019). Artificial Intelligence Technologies in Education: Benefits, Challenges and Strategies of Implementation. *IFIP International Workshop on Artificial Intelligence for Knowledge Management*, pp. 37-58.
- Passi, S. and Vorvoreanu, M. (2022). Overreliance on AI: Literature review. [online] Available at: <https://www.microsoft.com/en-us/research/uploads/prod/2022/06/Aether-Overreliance-on-AI-Review-Final-6.21.22.pdf>.
- Pinto dos Santos, D., Giese, D., Brodehl, S., Chon, S.H., Staab, W., Kleinert, R., ... and Baeßler, B., (2019). Medical students' attitude towards artificial intelligence: a multicentre survey. *European Radiology*, 29, pp.1640-1646.
- Pratama, M.P., Sampelolo, R. and Lura, H., (2023). Revolutionizing education: Harnessing the power of artificial intelligence for personalized learning. *Klasikal: Journal of Education, Language Teaching and Science*, [online] 5(2), pp.350–357. doi:<https://doi.org/10.52208/klasikal.v5i2.877>.
- Ravi Kumar, V.V. and Raman, R. (2022). Student Perceptions on Artificial Intelligence (AI) in higher education. *2022 IEEE Integrated STEM Education Conference (ISEC)*. doi:<https://doi.org/10.1109/isec54952.2022.10025165>.
- Russell, S.J. and Norvig, P. (2016) *Artificial Intelligence: A Modern Approach*. 4th ed. Harlow: Pearson.
- Santomartino, S.M. and Yi, P.H., (2022). Systematic review of radiologist and medical student attitudes on the role and impact of AI in radiology. *Academic Radiology*, 29(11), pp.1748-1756.
- Saplacan, D., Herstad, J. and Pajalic, Z. (2018). Feedback from Digital Systems Used in Higher Education: An Inquiry into Triggered Emotions - Two Universal Design Oriented Solutions for a Better User Experience. *Studies in Health Technology and Informatics*, [online] 256, pp.421–430. Available at: <https://pubmed.ncbi.nlm.nih.gov/30371503/>.
- Selwyn, N. (2019) *Should Robots Replace Teachers? AI and the Future of Education*. Cambridge: Polity Press.
- Seo, K., Tang, J., Roll, I., Fels, S. and Yoon, D. (2021). The Impact of Artificial Intelligence on Learner–instructor Interaction in Online Learning. *International Journal of Educational Technology in Higher Education*, [online] 18(1), pp.1–23. doi:<https://doi.org/10.1186/s41239-021-00292-9>.
- Sperling, K., Stenliden, L., Nissen, J. and Heintz, F., (2022) 'Still w(AI)ting for the automation of teaching: An exploration of machine learning in Swedish primary education using Actor-Network Theory', *European Journal of Education*, 57(4), pp.584-600.
- Suppes, P., & Morningstar, M. (1969). Computer-assisted instruction. *Science*, 166(3903), 343-350.
- Swiecki, Z., Khosravi, H., Chen, G., Martinez-Maldonado, R., Lodge, J.M., Milligan, S., Selwyn, N. and Gašević, D. (2022). Assessment in the age of artificial intelligence. *Computers and Education: Artificial Intelligence*, [online] 3(3), p.100075. doi:<https://doi.org/10.1016/j.caeai.2022.100075>.
- Tavakol, M. and Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, [online] 2, pp.53–55. doi:<https://doi.org/10.5116/ijme.4dfb.8dfd>.

- Van Der Vorst, T., & Jelcic, N. (2019). Artificial Intelligence in Education Can AI bring the full potential of personalized learning to education?
- VanLehn, K. (2011). The Relative Effectiveness of Human Tutoring, Intelligent Tutoring Systems, and Other Tutoring Systems. *Educational Psychologist*, 46(4), 197-221.
- Vittorini, P., Menini, S. and Tonelli, S. (2020). An AI-Based System for Formative and Summative Assessment in Data Science Courses. *International Journal of Artificial Intelligence in Education*. doi:<https://doi.org/10.1007/s40593-020-00230-2>.
- Whitby, B. (2008) *Artificial Intelligence: A Beginner's Guide*. Oxford, U.K.: Oneworld
- Woolf, B. P. (2008). *Building Intelligent Interactive Tutors: Student-Centered Strategies for Revolutionizing E-Learning*. Morgan Kaufmann.
- Zajko, M. (2022). Artificial intelligence, algorithms, and social inequality: Sociological contributions to contemporary debates. *Sociology Compass*, [online] 16(3). doi:<https://doi.org/10.1111/soc4.12962>.
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019) 'Systematic review of research on artificial intelligence applications in higher education – where are the educators?', *International Journal of Educational Technology in Higher Education*, 16(39).
- Zhang, T., Wang, X., and Li, H. (2023) 'The application of artificial intelligence technology in education influences Chinese adolescent's emotional perception'. *Current Psychology*, 42(3), pp. 45-56.

Appendix A: ANOVA Results Differences Across AI Proficiency Levels

ANOVA

	Sum of Square s	df	Mean Squar e	F	p- valu e
Explaining course material clearly and concisely	60.513	4	15.128	5.199	<.001
Inspiring students to set and achieve their goals	34.095	4	8.524	4.141	.003
Adapting course content to match students' learning styles	20.693	4	5.173	1.514	.199
Ability to keep students engaged with the course	40.018	4	10.005	3.594	.007
Introducing stimulating ideas about the subject	43.070	4	10.767	3.661	.007
Managing and delivering an entire course effectively	47.992	4	11.998	3.739	.006
Grading assignments and exams quickly and accurately	6.042	4	1.511	.443	.777
Fair and unbiased grading	6.155	4	1.539	.497	.738
Making fewer errors in grading	1.893	4	.473	.154	.961
Transparency in grading	20.458	4	5.115	1.454	.217
Providing constructive feedback to students' work	43.837	4	10.959	3.545	.008
Providing timely feedback to assignments and exams	5.663	4	1.416	.389	.816

Recommend course material based on students' career goals	24.634	4	6.158	2.039	.090
Updating course content to match evolving industry demands	34.760	4	8.690	3.004	.019
Designing learning activities that replicate real business environments	26.620	4	6.655	2.176	.073
Integrating practical skills needed in the job market into the course	44.776	4	11.194	4.180	.003
Preparing students for real-world jobs	32.344	4	8.086	3.186	.014

Descriptives: Differences Across AI Proficiency Levels

		Explaining course material clearly and concisely		Inspiring students to set and achieve their goals		Adapting course content to match students' learning styles		Ability to keep students engaged with the course		Introducing stimulating ideas about the subject		Managing and delivering an entire course effectively	
	N	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD
Advanced:	30	3.13	1.613	4.87	1.852	4.4	2.078	4.07	1.999	3.6	1.85	3.43	1.942
Proficient:	97	4.33	1.807	5.58	1.42	4.04	1.842	4.98	1.671	4.59	1.766	4.25	1.899
Intermediate:	71	4.39	1.544	5.94	1.264	4.55	1.779	5.31	1.509	4.9	1.631	4.72	1.587
Beginner:	24	5.17	1.857	6.17	1.341	4.92	1.792	5.54	1.668	5.13	1.541	5.04	1.732
Novice:	2	5	1.414	4.5	2.121	5	1.414	5	1.414	4.5	2.121	5	1.414

		Grading assignments and exams quickly and accurately		Fair and unbiased grading		Making fewer errors in grading		Transparency in grading		Providing constructive feedback to students' work		Providing timely feedback to assignments and exams	
	N	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD
Advanced:	30	2.9	1.749	2.87	1.814	3.23	1.888	2.83	1.724	3.87	2.08	3.1	2.155
Proficient:	97	3.19	1.949	2.99	1.821	3.25	1.809	3.59	1.946	4.64	1.792	3.53	1.926
Intermediate:	71	3.37	1.717	3.25	1.688	3.38	1.659	3.69	1.806	5.21	1.539	3.55	1.73
Beginner:	24	3.29	1.853	3.17	1.579	3.25	1.567	3.92	1.909	5.17	1.81	3.58	1.954

Novice:	2	4	2.828	4	2.828	4	2.828	4	2.828	5	1.414	4	2.828

		Recommend course material based on students' career goals		Updating course content to match evolving industry demands		Designing learning activities that replicate real business environments		Integrating practical skills needed in the job market into the course		Preparing students for real-world jobs	
	N	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD
Advanced:	30	3.53	2.063	3.1	1.915	3.9	1.971	3.73	2.196	4.2	2.074
Proficient:	97	3.85	1.758	3.59	1.718	4.19	1.767	4.73	1.611	5.12	1.536
Intermediate:	71	4.07	1.589	3.9	1.666	4.66	1.702	4.94	1.52	5.24	1.563
Beginner:	24	4.75	1.675	4.63	1.408	5	1.474	5.33	1.167	5.63	1.209

Multiple Comparisons: Differences Across AI Proficiency Levels

Explaining course material clearly and concisely

Level of understanding of AI tools and technology (I vs J)	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
				Lower Bound	Upper Bound
Advanced vs Proficient:	-1.197*	.356	.026	-2.30	-.09
Advanced vs Intermediate:	-1.261*	.371	.024	-2.41	-.11
Advanced vs Beginner:	-2.033*	.467	.001	-3.48	-.58
Advanced vs Novice:	-1.867	1.246	.691	-5.74	2.00
Proficient vs Intermediate:	-.064	.266	1.000	-.89	.76
Proficient vs Beginner:	-.837	.389	.331	-2.04	.37
Proficient vs Novice:	-.670	1.219	.990	-4.46	3.12
Intermediate vs Beginner:	-.772	.403	.454	-2.02	.48
Intermediate vs Novice:	-.606	1.223	.993	-4.41	3.19
Beginner vs Novice:	.167	1.255	1.000	-3.73	4.07

Inspiring students to set and achieve their goals

Level of understanding of AI tools and technology (I vs J)	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
				Lower Bound	Upper Bound
Advanced vs Proficient:	-.711	.300	.233	-1.64	.22
Advanced vs Intermediate:	-1.077*	.312	.020	-2.05	-.11

Advanced vs Beginner:	-1.300*	.393	.030	-2.52	-.08
Advanced vs Novice:	.367	1.048	.998	-2.89	3.62
Proficient vs Intermediate:	-.366	.224	.615	-1.06	.33
Proficient vs Beginner:	-.589	.327	.519	-1.61	.43
Proficient vs Novice:	1.077	1.025	.893	-2.11	4.26
Intermediate vs Beginner:	-.223	.339	.980	-1.28	.83
Intermediate vs Novice:	1.444	1.029	.741	-1.75	4.64
Beginner vs Novice:	1.667	1.056	.647	-1.61	4.95

Ability to keep students engaged with the course

Level of understanding of AI tools and technology (I vs J)	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
				Lower Bound	Upper Bound
Advanced vs Proficient:	-.913	.349	.148	-2.00	.17
Advanced vs Intermediate:	-1.248*	.364	.022	-2.38	-.12
Advanced vs Beginner:	-1.475*	.457	.037	-2.89	-.06
Advanced vs Novice:	-.933	1.218	.964	-4.72	2.85
Proficient vs Intermediate:	-.335	.262	.802	-1.15	.48
Proficient vs Beginner:	-.562	.380	.702	-1.74	.62
Proficient vs Novice:	-.021	1.192	1.000	-3.72	3.68
Intermediate vs Beginner:	-.227	.395	.988	-1.45	1.00
Intermediate vs Novice:	.314	1.197	.999	-3.40	4.03
Beginner vs Novice:	.542	1.228	.996	-3.27	4.36

Introducing stimulating ideas about the subject

Level of understanding of AI tools and technology (I vs J)	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
				Lower Bound	Upper Bound
Advanced vs Proficient:	-.988	.358	.112	-2.10	.13
Advanced vs Intermediate:	-1.301*	.373	.018	-2.46	-.14
Advanced vs Beginner:	-1.525*	.470	.035	-2.98	-.07
Advanced vs Novice:	-.900	1.252	.972	-4.79	2.99
Proficient vs Intermediate:	-.314	.268	.849	-1.15	.52
Proficient vs Beginner:	-.537	.391	.756	-1.75	.68
Proficient vs Novice:	.088	1.225	1.000	-3.72	3.89
Intermediate vs Beginner:	-.224	.405	.989	-1.48	1.03
Intermediate vs Novice:	.401	1.230	.999	-3.42	4.22
Beginner vs Novice:	.625	1.262	.993	-3.30	4.55

Managing and delivering an entire course effectively

Level of understanding of AI tools and technology (I vs J)	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
				Lower Bound	Upper Bound
Advanced vs Proficient:	-.814	.374	.319	-1.98	.35
Advanced vs Intermediate:	-1.285*	.390	.031	-2.50	-.07
Advanced vs Beginner:	-1.608*	.491	.032	-3.13	-.08
Advanced vs Novice:	-1.567	1.308	.838	-5.63	2.50
Proficient vs Intermediate:	-.471	.280	.587	-1.34	.40
Proficient vs Beginner:	-.794	.408	.438	-2.06	.47
Proficient vs Novice:	-.753	1.280	.987	-4.73	3.22
Intermediate vs Beginner:	-.323	.423	.965	-1.64	.99
Intermediate vs Novice:	-.282	1.284	1.000	-4.27	3.71
Beginner vs Novice:	.042	1.318	1.000	-4.05	4.14

Providing constructive feedback to students' work

Level of understanding of AI tools and technology (I vs J)	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
				Lower Bound	Upper Bound
Advanced vs Proficient:	-.773	.367	.355	-1.91	.37
Advanced vs Intermediate:	-1.345*	.383	.017	-2.53	-.16
Advanced vs Beginner:	-1.300	.482	.126	-2.80	.20
Advanced vs Novice:	-1.133	1.284	.941	-5.12	2.86
Proficient vs Intermediate:	-.572	.275	.365	-1.43	.28
Proficient vs Beginner:	-.527	.401	.785	-1.77	.72
Proficient vs Novice:	-.361	1.256	.999	-4.26	3.54
Intermediate vs Beginner:	.045	.415	1.000	-1.25	1.33
Intermediate vs Novice:	.211	1.261	1.000	-3.71	4.13
Beginner vs Novice:	.167	1.294	1.000	-3.85	4.19

Updating course content to match evolving industry demands

Level of understanding of AI tools and technology (I vs J)	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
				Lower Bound	Upper Bound
Advanced vs Proficient:	-.484	.360	.771	-1.60	.63
Advanced vs Intermediate:	-.798	.375	.342	-1.96	.37
Advanced vs Beginner:	-1.522*	.469	.036	-2.98	-.06
Advanced vs Novice:	-.397	1.243	.999	-4.26	3.47

Proficient vs Intermediate:	-.314	.266	.845	-1.14	.51
Proficient vs Beginner:	-1.037	.388	.132	-2.24	.17
Proficient vs Novice:	.088	1.215	1.000	-3.69	3.86
Intermediate vs Beginner:	-.724	.402	.519	-1.97	.52
Intermediate vs Novice:	.401	1.219	.999	-3.39	4.19
Beginner vs Novice:	1.125	1.252	.937	-2.76	5.01

Integrating practical skills needed in the job market into the course

Level of understanding of AI tools and technology (I vs J)	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
				Lower Bound	Upper Bound
Advanced vs Proficient:	-.999	.342	.078	-2.06	.06
Advanced vs Intermediate:	-1.210*	.356	.023	-2.32	-.10
Advanced vs Beginner:	-1.600*	.448	.014	-2.99	-.21
Advanced vs Novice:	.233	1.195	1.000	-3.48	3.95
Proficient vs Intermediate:	-.212	.256	.953	-1.01	.58
Proficient vs Beginner:	-.601	.373	.628	-1.76	.56
Proficient vs Novice:	1.232	1.169	.892	-2.40	4.86
Intermediate vs Beginner:	-.390	.386	.907	-1.59	.81
Intermediate vs Novice:	1.444	1.173	.824	-2.20	5.09
Beginner vs Novice:	1.833	1.204	.678	-1.91	5.58

Preparing students for real-world jobs

Level of understanding of AI tools and technology (I vs J)	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
				Lower Bound	Upper Bound
Advanced vs Proficient:	-.924	.333	.107	-1.96	.11
Advanced vs Intermediate:	-1.039	.347	.065	-2.12	.04
Advanced vs Beginner:	-1.425*	.436	.033	-2.78	-.07
Advanced vs Novice:	-.800	1.163	.976	-4.41	2.81
Proficient vs Intermediate:	-.116	.249	.995	-.89	.66
Proficient vs Beginner:	-.501	.363	.753	-1.63	.63
Proficient vs Novice:	.124	1.138	1.000	-3.41	3.66
Intermediate vs Beginner:	-.386	.376	.902	-1.55	.78
Intermediate vs Novice:	.239	1.142	1.000	-3.31	3.79
Beginner vs Novice:	.625	1.173	.991	-3.02	4.27

Appendix B: Differences across demographic groups

1. Differences Across Genders:
2. Differences Across Age Groups:
3. Differences Across Education Level

	Mean Undergraduate	Mean Graduate	t	df	P-value	Std. Error Difference
Explaining course material clearly and concisely	4.47	4.16	-1.294	217	.197	.240
Inspiring students to set and achieve their goals	5.61	5.70	.454	217	.651	.201
Adapting course content to match students' learning styles	4.34	4.41	.257	217	.797	.253
Ability to keep students engaged with the course	5.25	4.81	-1.866	216	.063	.231
Introducing stimulating ideas about the subject	4.75	4.54	-.883	217	.378	.239
Managing and delivering an entire course effectively	4.53	4.27	-1.050	217	.295	.250
Grading assignments and exams quickly and accurately	3.26	3.16	-.416	217	.678	.250
Fair and unbiased grading	2.89	3.32	-1.796	216	.074	.239
Making fewer errors in grading	3.43	3.18	-1.081	217	.281	.237
Transparency in grading	3.79	3.35	-1.714	216	.088	.256
Providing constructive feedback to students' work	4.90	4.67	-.964	217	.336	.243
Providing timely feedback to assignments and exams	3.36	3.57	-.805	217	.422	.257
Recommend course material based on students' career goals	3.85	4.12	-1.109	217	.268	.239
Updating course content to match evolving industry demands	3.90	3.59	-1.310	216	.192	.235
Designing learning activities that replicate real business environments	4.43	4.32	-.453	215	.651	.242
Integrating practical skills needed in the job market into the course	4.72	4.73	.047	217	.963	.230

Preparing students for real-world jobs	5.17	4.99	-.819	$\frac{21}{7}$	.414	.220

Summary Brief

Applying Kolb's Experiential Learning Theory in an Immersive Live-Case: Process and Implications

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Experiential learning has become a staple of marketing undergraduate education, offering students a dynamic alternative to traditional lecture-based instruction. Emphasized by accrediting bodies such as the AACSB (Association to Advance Collegiate Schools of Business, 2025), experiential learning recognizes the importance of connecting theoretical knowledge with real-world application. This approach includes a variety of methods such as internships, service learning, simulations, and project-based assignments.

These methods not only engage students more deeply but also help them develop critical soft skills such as communication, adaptability, and teamwork. One of the most common approaches is the written business case method. These cases are designed to cultivate analytical problem-solving, teamwork, and leadership skills—qualities highly sought by employers. However, despite their widespread adoption, traditional case methods have inherent biases and limitations, often failing to capture the nuanced realities of real-world business challenges (Burns, 1990). One alternative to the written case method is the immersive live-case approach, in which the class partners with a sponsoring organization to examine a real-time issue. In this paper we will explore our implementation of the live-case approach through the lens of Kolb's Experiential Learning Theory (Kolb 1984) as well as describe our process.

References

- Association to Advance Collegiate Schools of Business. (2025). 2020 interpretive guidance for AACSB business accreditation. [2020-aacsb-business-accreditation-standards-feb-28-2025.pdf](#) accessed on June 26, 2025.
- Burns, A. C. (1990). The use of live case studies in business education: Pros, cons, and guidelines. In J. W. Gentry (Ed.), *Guide to business gaming and experiential learning*, Association for Business Simulation and Experiential Learning (ABSEL), 201-215. Nichols/GP Publishing.
- Gentry, J. W. (1990). What is experiential learning? In J. W. Gentry (Ed.), *Guide to business gaming and experiential learning*, Association for Business Simulation and Experiential Learning (ABSEL), 9–20. Nichols/GP Publishing.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.

**SESSION 21.6 PANEL: DEVELOPING AND
IMPLEMENTING GAME CHANGING STUDY ABROAD
PROGRAMS**

Panelists:

Kevin Shanahan

Lucy Matthews

Diane Edmondson

Mike Breazeale

**SESSION 21.7: GLOBAL MINDS, GROUNDED
CLASSROOMS: IDENTITY, WELL-BEING, AND
DIGITAL BALANCE**

Moderators:

Mario Gonzalez-Fuentes

Summary Brief

Trauma-Informed Co-Creation: Enhancing Student Self-Efficacy and Well-Being in Marketing Education

Natalie Marquart, Middle State Tennessee University

Caitlin Michael, Saint Vincent College

This conceptual paper proposes a testable framework integrating trauma-informed pedagogy with Service-Dominant Co-Creation Theory to address both rising mental health challenges and declines in engagement in marketing education. Drawing on self-efficacy theory, we argue that trauma-informed teaching enhances students' self-efficacy, which, in turn, fosters deeper engagement in the co-creation processes of symmetry, alignment, and agreement. This leads to positive outcomes, including improved student well-being, engagement, and career readiness. We outline propositions linking trauma-informed practices to educational outcomes, identify potential mediators and moderators, and discuss implications for research and pedagogy in marketing education.

Introduction

The COVID-19 pandemic has reshaped higher education, amplifying challenges in student mental health, engagement, and career preparedness. Marketing educators now face a dual mandate: maintain academic rigor, while simultaneously creating psychologically safe and supportive environments for increasingly diverse and stressed student populations (Eisenberg et al., 2023). Traditional instructional approaches often overlook students' psychological readiness to engage, persist, and co-create value. Trauma-informed pedagogy (Carello & Butler, 2014) addresses these challenges by fostering safety, trust, and empowerment, conditions essential for building self-efficacy (Bandura, 1997). This paper develops a conceptual model positioning trauma-informed pedagogy as a driver of student self-efficacy, which in turn enables engagement in co-creation processes through enhanced symmetry, alignment, and agreement. These processes ultimately produce enhanced student well-being, engagement, and career readiness. This framework responds to calls for pedagogical innovation in marketing education and provides a basis for empirical testing.

Literature Review

Trauma-Informed Pedagogy

Trauma-informed teaching acknowledges that adverse experiences, from acute events to chronic stressors, can influence student engagement, learning, and behavior (Carello & Butler, 2014). Its core principles include safety, trust, collaboration, peer support, empowerment, and cultural responsiveness. While applied in primary (K-12) schools and counseling (Maynard et al., 2019), its adaptation to marketing education remains limited. Some professional development courses and certifications, such as those offered by the Association of College and University Educators, rely on teaching frameworks that are aligned with trauma-informed pedagogy to improve student outcomes (ACUE, 2025).

Self-Efficacy in Educational Contexts

Self-efficacy is the belief in one's ability to perform tasks successfully (Bandura, 1997). High self-efficacy predicts persistence, resilience, and active participation in classroom settings (Solberg et al., 1993). We propose that

trauma-informed practices may enhance self-efficacy by reducing perceived threats and increasing opportunities for mastery, social modeling, and constructive feedback.

Service-Dominant Logic and Co-Creation in Education

Service-Dominant Logic (Vargo & Lusch, 2004) frames education as a collaborative service process wherein students and educators co-create value. In higher education, co-creation is expressed through symmetry (shared power), alignment (shared goals), and agreement (shared decisions) (McColl-Kennedy et al., 2012; Frow et al., 2015). Engagement in these processes relies on both educator facilitation and student confidence, making self-efficacy a critical enabler. We suggest that education facilitation, through trauma-informed pedagogy, can foster both students' self-efficacy and engagement in co-creation processes.

Student Outcomes: Well-Being, Engagement, and Career Readiness

Well-being encompasses reduced stress, increased resilience, and a sense of belonging (Bose, 2022; Kim et al., 2025). Engagement reflects cognitive, emotional, and behavioral investment. Career readiness refers to individuals' self-assessed confidence in applying skills to professional contexts. Prior research links co-creation to improved satisfaction and skill development (Dewarani & Alversia, 2023); however, mechanisms connecting trauma-informed teaching to these outcomes are underexplored.

Propositions and Justification

P1: Trauma-Informed Pedagogy → Student Self-Efficacy Trauma-informed pedagogy builds classroom safety, predictability, choice, and empowerment (Maynard et al., 2019). These conditions directly correspond to Bandura's (1997) sources of self-efficacy, including mastery experiences, vicarious learning, and supportive feedback. Such practices cultivate students' belief in their academic ability, creating an enabling learning climate (Brunzell, Stokes, & Waters, 2016). Studies show trauma-informed interventions improve both educators' competence and students' perceptions of support, suggesting parallel gains in self-efficacy (Record-Lemon & Buchanan, 2017).

P2: Student Self-Efficacy → Engagement in Co-Creation Students with high self-efficacy are more willing to take risks, voice preferences, and accept shared responsibility; these behaviors are essential for meaningful co-creation (Cook-Sather, Bovill, & Felten, 2014). For instance, self-efficacy consistently predicts engagement and persistence in active learning (Reschly & Christenson, 2012). Confident students contribute more actively to collaborative design and decision-making (Laenens & Vandervieren, 2025), suggesting that students' engagement in co-creation processes can be enhanced through practices that foster students' self-efficacy.

P3: Co-Creation → Student Well-Being Co-creation fosters autonomy, belonging, and perceived fairness, psychological resources that protect against stress and isolation (Ryan & Deci, 2017). Reviews show that student-staff partnerships enhance self-esteem, self-awareness, and a sense of being valued, all core components of well-being (Bovill, 2020; Mercer-Mapstone et al., 2017). Thus, these relational and motivational benefits position co-creation as a viable approach for promoting student well-being.

P4: Co-Creation → Student Engagement When students help shape learning activities, they perceive greater relevance and ownership, leading to stronger cognitive, emotional, and behavioral engagement (Kuh, 2009).

Evidence from higher education case studies shows co-creation boosts participation, deep learning, and satisfaction, aligning with established engagement constructs (Bovill, 2020; Gkogkidis & Dacre, 2021).

P5: Co-Creation → Career Readiness Co-creation practices, such as authentic assessments, negotiated projects, and student–staff partnerships, provide applied experience in teamwork, communication, problem-solving, and self-directed work (Bovill, 2020). These skills align with competencies identified in career-readiness frameworks like NACE (2024). Research on employability-oriented pedagogy indicates that such experiences enhance graduates’ adaptability and workplace preparedness (Jackson & Bridgstock, 2021).

P6: Self-Efficacy Mediates Trauma-Informed Pedagogy → Co-Creation This proposed mediation reflects established social-cognitive logic: trauma-informed pedagogy strengthens students’ self-efficacy (P1), which then increases their engagement in co-creation (P2). Extant findings demonstrate that self-efficacy mediates the effects of supportive teaching practices on participation and collaborative learning (Martin & Rimm-Kaufman, 2015), making this pathway theoretically consistent and empirically supported.

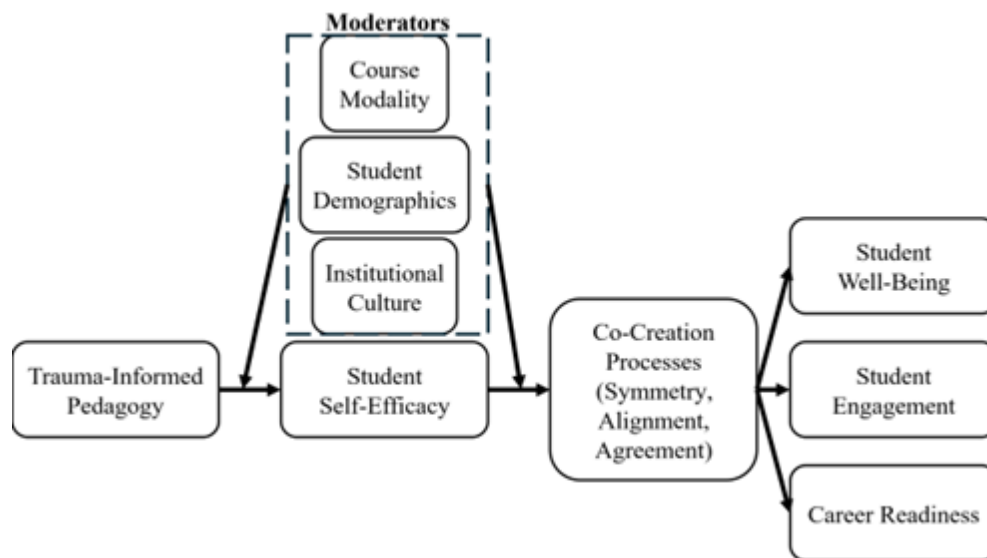
P7: Moderators — Modality, Student Demographics, Institutional Culture The strength of these relationships is dependent upon contextual factors.

P7a: Modality as a Moderator The impact of trauma-informed practices on student–educator co-creation will vary by course modality (e.g., in-person vs. online). Synchronous, face-to-face settings may foster more immediate relational cues, emotional attunement, and collaborative meaning-making, whereas asynchronous or remote modalities may constrain these elements (Donaghy et al., 2019; Shore et al., 2018). Thus, the positive association between trauma-informed practices and co-creation is expected to be stronger in in-person contexts.

P7b: Student Demographics as a Moderator The relationship between trauma-informed practices and co-creation will differ across student demographic segments, such as age, cultural background, and socioeconomic status. Variations in lived experience, communication norms, and historical exposure to systemic inequities can influence how students perceive and engage in co-creation (Brave Heart et al., 2011; Jernigan et al., 2015). Consequently, trauma-informed practices are likely to yield stronger co-creation effects among student populations with greater historical or contextual vulnerability.

P7c: Institutional Culture as a Moderator Institutional culture will moderate the link between trauma-informed practices and co-creation. Organizations that embed trauma-informed values, safety, transparency, and collaboration into their routines and policies provide an environment that supports co-creative student engagement (SAMHSA, 2014; Bowen & Ostroff, 2004). In contrast, cultures that emphasize transactional efficiency in place of relationship-building may attenuate these benefits (Bai & Sun, 2025). Thus, it is expected that the positive outcomes will be stronger among institutions with the former routines and policies in place.

Proposed Conceptual Model



Conclusion

This paper contributes to marketing education by advancing a trauma-informed co-creation framework that addresses the urgent challenge of supporting student mental health to foster academic and professional success. The model positions trauma-informed pedagogy as a strategic lever for enhancing self-efficacy, enabling collaborative learning processes, and producing outcomes that extend beyond the classroom. Theoretically, the framework integrates trauma-informed teaching principles with Service-Dominant Logic, bridging pedagogical research and services marketing theory. Practically, it offers educators an actionable strategy for improving important student outcomes. By building psychologically safe and empowering learning environments, students will benefit from improved self-efficacy and engagement in co-creation processes, ultimately promoting their well-being, engagement in learning, and career readiness. Future empirical studies can test the proposed propositions, examine boundary conditions, and explore longitudinal effects on student success.

References

- Association of College and University Educators (n.d.). ACUE. ACUE. Retrieved August 13, 2025, from www.acue.org
- Bai, Jingkun, and Xiaotong Sun. "Expansion of the Psychological Contract: Unlocking the Code of Innovation Behavior in Open Innovation Community." *Journal of Applied Social Psychology* (2025).
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W.H. Freeman.
- Bose, Mousumi. (2022). "The Role of Consumer Resilience on Situated Learning, Active Coping and Well-being while Dealing with Service Experiences: Psychological Flexibility as a Moderator." *Journal of Applied Marketing Theory* 9, no. 1: 3.
- Bovill, C. (2020). Co-creation in learning and teaching: The case for a whole-class approach in higher education. *Higher Education*, 79(6), 1023–1037.
- Bowen, D. E., & Ostroff, C. (2004). Understanding HRM–firm performance linkages: The role of the ‘strength’ of the HRM system. *Academy of Management Review*, 29(2), 203–221.

- Brave Heart, M. Y. H., Chase, J., Elkins, J., & Altschul, D. (2011). Historical trauma among Indigenous Peoples of the Americas: Concepts, research, and clinical considerations. *Journal of Psychoactive Drugs*, 43(4), 282–290.
- Brunzell, T., Stokes, J., & Waters, L. (2016). Shifting teacher practice in trauma-affected classrooms: Practice frameworks from trauma-informed positive education. *Contemporary School Psychology*, 20(1), 63–83.
- Carello, J., & Butler, L. D. (2014). The impact of trauma on students and teaching: Engaging a trauma-informed framework. *Journal of Teaching in Social Work*, 34(3), 263–278.
- Cook-Sather, A., Bovill, C., & Felten, P. (2014). *Engaging students as partners in learning and teaching: A guide for faculty*. Jossey-Bass.
- Dewarani, Geraldine, and Yeshika Alversia. (2023) "The influence of customer involvement and engagement on co-creation of services, satisfaction, and loyalty: The case of Software as a Service." *Innovative Marketing* 19, no. 2: 27.
- Donaghy, D. I., McKeown, A., Moffatt, M. M., & Murphy, G. R. (2019). Telehealth and therapeutic alliance: A systematic review. *Journal of Telemedicine and Telecare*, 25(8), 445–457.
- Eisenberg, D., Lipson, S. K., et al. (2023). The Healthy Minds Study: National data on student mental health.
- Frow, P., McColl-Kennedy, J. R., & Payne, A. (2015). Co-creation practices: Their role in shaping a health care ecosystem. *Industrial Marketing Management*, 44, 24–35.
- Gkogkidis, V., & Dacre, N. (2021). Co-creating educational project management board games to enhance student engagement. *ArXiv*, March 27.
- Jackson, D., & Bridgstock, R. (2021). What actually works to enhance graduate employability? The relative value of curricular, co-curricular, and extra-curricular learning. *Higher Education*, 81, 723–739.
- Jernigan, V. B. B., Bartgis, P., D'Amico, J., & Brown, D. W. (2015). Addressing food insecurity in Native American communities. *American Journal of Public Health*, 105(S3), S353–S359.
- Kim, Hyangmi, Jacob M. Eubank, John Orazem, D. J. Oberlin, Elgloria A. Harrison, and Collette M. Brown. (2025). "The Impact of a Sense of Belonging on the Health-Related Quality of Life among the Elderly in New York City." *American Journal of Public Health* 13, no. 1: 20-37.
- Kuh, G. D. (2009). High-impact educational practices: What they are, who has access to them, and why they matter. AAC&U.
- Laenens, E., & Vandervieren, E. (2025). Introducing co-creation and generative coaching into learning environments: The effects on students' self-regulation skills, self-efficacy and academic efficacy. *Proceedings of HEAd'25, Valencia*.
- Martin, D. P., & Rimm-Kaufman, S. E. (2015). Do student self-efficacy and teacher–student interaction quality mediate the effects of classroom organization on student engagement? *Learning and Instruction*, 36, 38–49.
- Maynard, Brandy R., Anne Farina, Nathaniel A. Dell, and Michael S. Kelly. "Effects of trauma-informed approaches in schools: A systematic review." *Campbell systematic reviews* 15, no. 1-2 (2019): e1018.
- McColl-Kennedy, J. R., et al. (2012). Health care customer value co-creation practice styles. *Journal of Service Research*, 15(4), 370–389.
- Mercer-Mapstone, L., et al. (2017). A systematic literature review of students as partners in higher education. *International Journal for Students as Partners*, 1(1), 1–23.

- National Association of Colleges and Employers (n.d.). What is Career Readiness? NACE. Retrieved August 13, 2025, from <https://www.nacweb.org/career-readiness/competencies/career-readiness-defined>
- Record-Lemon, Rosalynn M., and Marla J. Buchanan. "Trauma-informed practices in schools: A narrative literature review." *Canadian Journal of Counselling and Psychotherapy* 51, no. 4 (2017).
- Reschly, A. L., & Christenson, S. L. (2012). Jingle, jangle, and conceptual haziness: Evolution and future directions of the engagement construct. In S. L. Christenson, A. L.
- SAMHSA. (2014). SAMHSA's concept of trauma and guidance for a trauma-informed approach. Substance Abuse and Mental Health Services Administration.
- Shore, J. H., Yellowlees, L., Caudill, P., & Johnston, J. D. (2018). Telepsychiatry: Videoconferencing in the delivery of psychiatric care. *American Journal of Psychiatry*, 175(3), 256–262.
- Solberg, V. S., O'Brien, K., Villareal, P., Kennel, R., & Davis, B. (1993). Self-efficacy and Hispanic collegestudents: Validation of the College Self-Efficacy Instrument. *Hispanic Journal of Behavioral Sciences*, 15, 80-95.
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1), 1–17.

Summary Brief

To be global or not to be, that's the question: Gen Z's college students views of globalization and its role in their cultural identities.

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Mario V. Gonzalez-Fuentes. Trinity University. San Antonio, TX, U.S.A.

In the field of higher education, internationalization is a cornerstone of a contemporary education. Its importance is underscored by AACSB's strong advocacy and support of globalization and internationalization within business education. Although many articles discuss these curricular issues from a university/program and teaching/learning perspective, it's less well understood how students perceive them, particularly post-covid. In this mixed methods students are asked to define globalization, provide examples that illustrate it in practice and complete Gonzalez-Fuentes (2019)'s adapted versions of Cleveland, Laroche and Takahashi (2015)'s instruments of national and global identity. Our analysis will identify patterns and compare them with those found previously for early Gen Z's cohort of college students. Emerging patterns in the understanding of globalization will also be examined by the degree and level of their national and global identities.

Motivation

For the past three decades, efforts to internationalize curricula in higher education –particularly in business education-- have become ubiquitous across the world. This invariably has meant the development of global awareness among students to create “global citizens” (Kho et al., 2025). However, a deglobalization rhetoric has slowly made its way into the social discourse which the COVID-19 pandemic seemed to have exacerbated (Witt et al., 2021). Some studies have started identifying 2016 to the present time as the deglobalization era (Peng et al., 2021).

Gen Z has been characterized as significantly more connected, anxious, pragmatic, and globally aware than previous generational cohorts (Seemiller & Grace, 2016; Twenge, 2017). They have also been portrayed as a cohort introduced to a marketplace marked by the significant influence of global popular culture (Fromm and Read, 2018). Thus, given the colliding influences aforementioned, it seems imperative to understand the perspectives current college students have about globalization and its role in the current consumer culture.

Background

The main psychological effect of globalization occurs on the self-concept or identity (Arnett, 2002). Globalization affects individuals' cultural identities through the changes enacted in their local and global selves (Gonzalez-Fuentes, 2019). The former gauges the degree to which an individual embraces the values and norms accepted by a particular cultural group (Markus and Kitayama, 1991), while the latter reflects a positive attitude towards a multicultural mindset and the embracement of the global community (Westjohn, et al., 2009).

In their mixed methods study, Davis et al. (2019) identified two typologies of narratives that early cohorts of Gen Z's college students had regarding the term "globalization." One labeled utilitarian, which conceived globalization as a global economic integration marked by free trade and multinational business operations. A second perspective, labeled humanistic, view this process as involving movement of people, knowledge, ideas, and technology across borders. Since their study, Gen Z's college students have experienced the COVID-19 pandemic disruption as well as a significant surge in negative views of and resistance to globalization across the world.

In parallel, Gonzalez-Fuentes (2019) presented quantitative evidence for a similar age cohort as Davis et al. (2019) highlighting how college students from collectivistic cultures (i.e. Japan) favor integrative views of global and local influences in their identities whereas their American counterparts seem to favor more ethnocentric strategies.

The current study proposes merging these two approaches (Davis et al., 2019; Gonzalez-Fuentes, 2019) to investigate the perspectives that younger cohorts of Gen Z's college students have regarding globalization as well as the role it plays in their cultural identities.

Methodology

We will draw our sample from a cross section of current business students at different stages of their college education at a private higher education institution. Participants will be administered an online survey through Qualtrics in which they will be asked, first, to respond to the open-ended questions developed by Davis et al. (2019): 1) Describe what the term globalization meant to you; and 2) Provide examples that illustrate your understanding of globalization. Subsequently, they will be presented with Gonzalez-Fuentes (2019)'s adapted versions of Cleveland, Laroche and Takahashi (2015)'s instruments of national and global identity. The adapted instrument comprises 77 statements designed to address respondents' orientations towards cosmopolitanism, global mass media, openness and self-identification to global consumer culture, as well as American culture and values, using a 7-point Likert scale. Finally, the survey will collect demographic and socioeconomic information.

Our analysis will focus, first, on determining patterns in the responses given to participants' conceptualizations of globalizations and to determine how different or similar these patterns are with respect to the ones found by Davis et al. (2019) for an early Gen Z's cohort of college students. Second, we will contrast the emerging patterns in the understanding of globalization with the different outcomes exhibited by participants in the degree and level of their national and global identities.

References

- Arnett, J. J. (2002). The psychology of globalization. *American Psychologist*, 57(10), 774–783.
- Cleveland, M., Laroche, M. & Takahashi, I. (2015). The intersection of global consumer Culture and national identity and the effect on Japanese consumer behavior. *Journal of International Consumer Marketing*, 27, 364-387.

- Davis, J.C., Gonzalez-Fuentes, M. & Robertson, K.R. (2019). What do Generation Z students mean when they talk about globalization? Summary brief in *Changing the Rhythm of Marketing: Are We Listening?* Jie G. Fowler and Jeri Weiser, Editors. New Orleans, LA: Society for Marketing Advances, 2019, 46-47.
- Fromm, J., & Read, A. (2018). *Marketing to GenZ, the rules for reaching this vast and very different generation of influencers*. New York, NY: AMACOM.
- Gonzalez-Fuentes, M. (2019). Millennials' national and global identities as drivers of materialism and consumer ethnocentrism," *Journal of Social Psychology*, 159(2), 170-189.
- Koh, A., Pashby, K., Tarc, P., & Yemini, M. (2025). Editorial: Internationalization in teacher education: discourses, policies, practices. *Teachers and Teaching*, 31(4), 536-549.
- Markus, H.R. & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98 (2), 224-253.
- Peng, M.W., Kathuria, N., Viana, F.L.E., & Carneiro-Lima, A. (2021). Conglomeration, (de)globalization, and COVID-19. *Management and Organization Review*, 17(2), 394-400.
- Seemiller, C., & Grace, M. (2016). *Generation Z Goes to College*. San Francisco, CA: Jossey-Bass.
- Twenge, J.M. (2017). *iGen: Why today's super-connected kids are growing up less rebellious, more tolerant, less happy – and completely unprepared for adulthood*. New York, NY: Altria.
- Westjohn, S.A., Arnold, M.J., Magnusson, P., Zdravkovic, S. & Xin Zhou, J. (2009). Technology readiness and usage: a global-identity perspective. *Journal of the Academy of Marketing Science*, 37, 250-265.
- Witt, M. A., Ping Li, P. Välikangas, L., & Lewin, A. (2021). De-globalization and decoupling: Game changing consequences? *Management and Organization Review*, 17(1), 6-15.

SESSION 21.8: FANS TO FOOD LABELS—HOW CONTEXT SHAPES VALUE

Moderators:

Abigail Torres Rico

Summary Brief

From Scarcity to Abundance: a conceptual study on the mindset effects on consumer decision-making

Madhuparna Majumder, MICA – The School of Ideas

Githa Heggde, MICA – The School of Ideas

This study conceptually explores the concept of scarcity and abundance mindsets as recurrent intellectual inclinations impacting consumer behavior. Drawing from behavioral economics and positive psychology, how the behavioral, affective and cognitive effects of different mindsets change the marketing strategies and consumer welfare is discussed. The paper concludes by highlighting the market strategies and academic inquiry, emphasizing the importance of balancing these mindsets in marketing communications and product design.

Introduction

Consumer decision-making does not happen in isolation but within the psychological frameworks that individuals use to understand their surroundings (Brown, 1979; Simpson et al, 2012). One important framework is how people perceive resources, either as scarce or abundant. This perception significantly impacts how consumers process information, evaluate options, and make choices (Civai et al., 2024). In marketing, companies often use cues related to scarcity and abundance, such as urgent promotions or images of luxurious lifestyles (Nechaeva et al, 2024). However, the cognitive effects of these cues are not fully understood when compared. Scarcity has received more focus in behavioral research because it limits cognitive capacity (Van Der Veer et al., 2024). The abundance mindset, based on ideas of broader attention and creative exploration, also deserves attention for its role in increasing consumer engagement. It is crucial to understand how these two mindsets interact (Vega, 2024). Doing so can help improve consumer insight models, create better marketing strategies, and promote ethical practices in the marketplace.

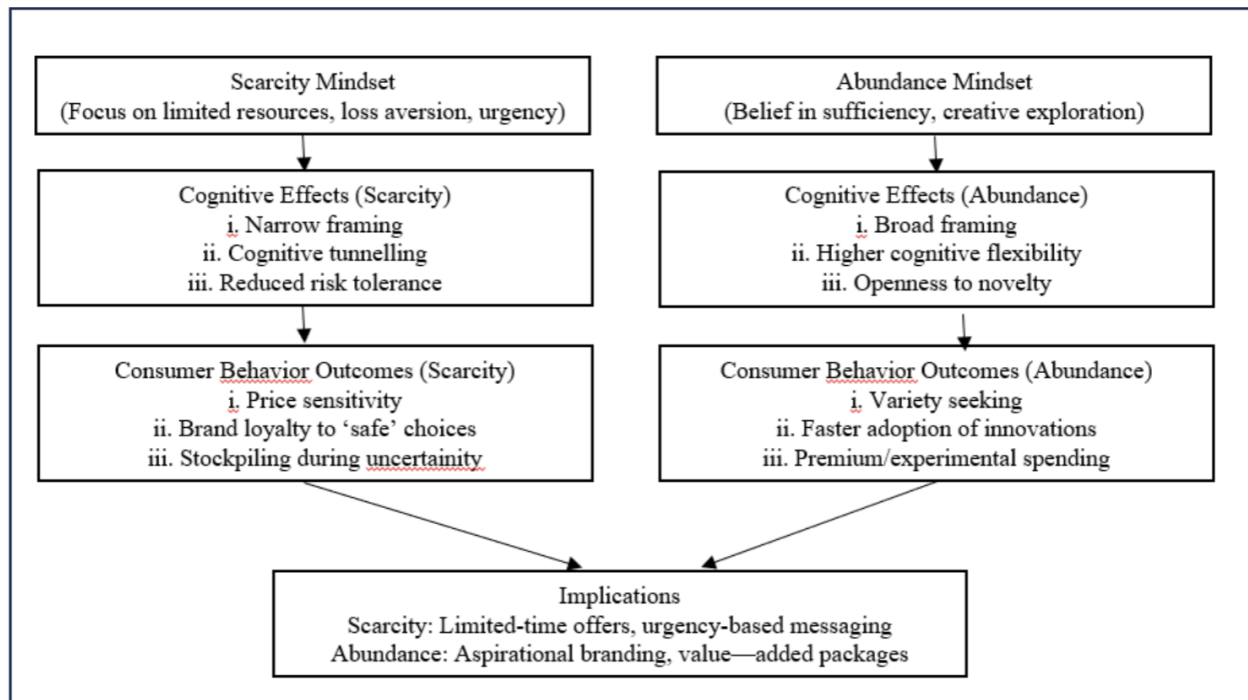
Background

The idea of scarcity as a psychological state has been notably presented by Mullainathan and Shafir. They explain it as a condition where a specific limitation, whether of money, time, or opportunity, dominates attention and mental resources (Cheek & Shafir, 2024). This domination creates what they call “tunneling.” In this state, focusing on the immediate issue prevents individuals from considering long-term goals or other opportunities. Scarcity can provide a short-term “focus dividend,” improving problem-solving for urgent needs (Van Der Veer et al., 2024b). However, when it lasts, it weakens the ability to think broadly and strategically. On the other hand, the abundance mindset, often discussed in the context of Fredrickson’s broaden-and-build theory, reflects a belief that resources are sufficient or can be replenished (Threet, 2024). This mindset promotes mental flexibility, exploration, and openness to new experiences. Consumers with an abundance orientation usually blend pleasure-driven and practical considerations, seek variety, and engage with brands that offer experiential or aspirational value. Yet both mindsets have potential downsides. Scarcity may cause excessive caution, hoarding, and missed chances. Abundance, meanwhile, can lead to overconsumption, complacency, or fatigue in making decision (Ghosh, 2022).

Theoretical underpinnings and research questions

This conceptual model is based on three theoretical pillars: the literature on scarcity-abundance mindset, regulatory focus theory, and cognitive bandwidth theory. The regulatory focus theory (Pham et al., 2022) explains how scarcity cues may cause prevention focus (risk avoidance) while abundance cues encourage promotion focus (goal pursuit); bandwidth theory explains the attentional trade-offs brought about by resource constraints; and mindset theory frames these orientations as interpretive lenses influencing information processing.

According to the model, abundance cues increase tolerance for delayed rewards, promote openness to new experiences, and broaden attentional scope, whereas scarcity cues increase present bias, narrow attentional scope, and amplify sensitivity to immediate gains. Certain consumer behaviors, such as brand switching, willingness to pay, purchase urgency, and loyalty formation, are influenced by these cognitive effects.



Conceptual Model

The main research question from this theory is: How do these mindsets, as lasting orientations rather than temporary feelings, influence consumer decisions and engagement in the marketplace over time?

What are the long-term effects on trust, loyalty, and consumer well-being?

This question is important because mindsets can change; they differ across product types and situations. a consumer might have an abundance mindset when spending on leisure or travel but show a scarcity mindset when budgeting for household expenses. Additionally, cultural factors play a role in shaping these orientations. in collectivist cultures, cues of scarcity might resonate more with group survival values, while cues of abundance might be perceived as wasteful. these cultural and situational differences indicate that to truly understand these mindsets, we need to move beyond simple categories to a more flexible and context-sensitive approach.

Managerial and research implications

From a management perspective, understanding whether a target segment favors scarcity or abundance framing provides a significant strategic benefit. Consumers who lean towards scarcity are likely to respond to

marketing that highlights stability, security, and the careful use of limited opportunities. Campaigns that focus on limited-time offers, exclusive memberships, or limited product releases can effectively encourage purchases in these groups. However, relying too much on these tactics can harm trust if consumers sense artificial scarcity or manipulative intent. On the other hand, abundance-oriented consumers respond better to marketing strategies that highlight exploration, variety, and premium experiences. These consumers might be drawn to subscription models that offer unlimited access, loyalty programs that provide experiential rewards, or campaigns that position consumption as part of a fulfilling lifestyle. However, this approach also risks promoting unsustainable consumption habits that could damage long-term brand credibility, especially in a time when consumers are increasingly concerned about environmental and social responsibility.

For researchers, the interaction between scarcity and abundance mindsets offers rich opportunities for study. Long-term studies could look at how repeated exposure to scarcity or abundance signals affects cognitive capacity, trust, and decision-making quality over time. Comparing cultures might reveal how these mindsets relate to social norms and economic structures. Experimental designs that include behavioral tracking and neuroimaging could clarify the differences in cognitive load between the two mindsets during actual purchasing decisions. Combining large-scale digital data with controlled lab experiments could also help bridge the gap between real-world relevance and causal understanding.

The ethical aspect of this research should not be ignored. While scarcity cues can drive sales effectively, their manipulative use can increase stress and deepen inequalities, especially among vulnerable consumers. Abundance cues, when used without regard for resource limits, may promote overconsumption and threaten sustainability efforts. Therefore, a vital area for both practice and research are finding marketing strategies that leverage the motivational power of these mindsets while protecting consumer well-being and encouraging responsible consumption.

Future research direction

Future studies may look at how attitude of scarcity and abundance varies over time, over different cultures discovering environmental drivers and other moderating factors like product and/service categories or socioeconomic backgrounds. In terms of methodology, psychophysiological methods to quantify cognitive load could be merged with experiments, field investigations and longitudinal designs to identify responsible pathways.

References

- Brown, W. (1979). The family and consumer decision making: A cultural view. *Journal of the Academy of Marketing Science*, 7(3), 335-345.
- Cheek, N. N., & Shafir, E. (2024). From Stigma to Scarcity: on interpersonal and cognitive sources of vulnerability for consumers in poverty. In *Review of marketing research* (pp. 69–81). <https://doi.org/10.1108/s1548-643520240000021005>
- Civai, C., Elbaek, C. T., & Capraro, V. (2024). Why scarcity can both increase and decrease prosocial behaviour: A review and theoretical framework for the complex relationship between scarcity and prosociality. *Current Opinion in Psychology*, 60, 101931.
- Ghosh, S. (2022). Time, scarcity, and abundance. *Frontiers in Research Metrics and Analytics*, 7, 974706.
- Nechaeva, O., Dasmí, C., Mazzoli, V., Vannucci, V., & Donvito, R. (2024). Scarcity in luxury brand digital communication: unveiling its effect on consumer perceptions. *International Journal of Advertising*, 1-32.
- Pham, T., Mathmann, F., Jin, H. S., & Higgins, E. T. (2022). How regulatory focus–mode fit impacts variety-seeking. *Journal of Consumer Psychology*, 33(1), 77–96. <https://doi.org/10.1002/jcpy.1317>
- Simpson, J. A., Griskevicius, V., & Rothman, A. J. (2012). Consumer decisions in relationships. *Journal of Consumer Psychology*, 22(3), 304-314.
- Threet, A. G. (2024). *A Spirit of Abundance and a Mindset of Enough* (Doctoral dissertation, University of Idaho).
- Van Der Veer, A., Madern, T., & Van Lenthe, F. J. (2024). Tunneling, cognitive load and time orientation and their relations with dietary behavior of people experiencing financial scarcity – an AI-assisted scoping review elaborating on scarcity theory. *International Journal of Behavioral Nutrition and Physical Activity*, 21(1). <https://doi.org/10.1186/s12966-024-01576-9>
- Van Der Veer, A., Madern, T., & Van Lenthe, F. J. (2024b). Tunneling, cognitive load and time orientation and their relations with dietary behavior of people experiencing financial scarcity – an AI-assisted scoping review elaborating on scarcity theory. *International Journal of Behavioral Nutrition and Physical Activity*, 21(1). <https://doi.org/10.1186/s12966-024-01576-9>
- Vega, E. (2024.). *The Abyss of abundance: consumer overconsumption and the road to environmental collapse*. Fordham Research Commons. https://research.library.fordham.edu/environ_2015/16

SESSION 21.9: PERSUASION IN THE AGE OF PLAYFUL AI

Moderators:

Amrita Dey

Summary Brief

Caveat “Promptor”—Overcoming Chatbot Errors in Customer Service

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Retailers have been deploying artificial intelligence for years, and recent advancements in natural language learning has steadily improved customers’ ability to “talk” to AI elements, such as chatbots, as they interact with the retailer to find answers to their customer service questions. There continue to be many challenges with deployed AI elements, such as inaccurate or even invented content, generally known as “hallucinations.” As AI is trained, there have been various attempts at reducing or eliminating the source of such errors. However, retailers must train their AI elements with their own internal content to enable successful customer service delivery, and this means any errors or unclear content that are in the content could be included, leading to poor customer service. This study seeks to describe such problematic content, how pervasive it is on retailer customer-facing websites, and whether deployed AI customer service elements include such content.

Overview

Retailers have been deploying artificial intelligence for years and recent advancements in natural language learning has steadily improved customers’ ability to “talk” to AI elements, such as chatbots, as they interact with the retailer to find answers to their customer service questions. There continue to be many challenges with deployed AI elements, such as inaccurate information or invented content. There have been various attempts at understanding and reducing the source of such errors (Ferraro et al 2024; Hannigan, et al 2024; Robertson et al, 2024).

In building their own custom AI applications retailers must train their AI elements with their existing content to enable customer service delivery. Any errors or other types of problematic content could be picked up, leading to built-in mistakes. This study seeks to describe such problematic content, how pervasive it is on retailer customer-facing websites, and whether deployed AI customer service elements include such content.

AI Implementation Challenges

Using AI in customer service has led to some unpredictable outcomes (Murray 2025; Yagoda 2024; Colin, 2025). The well-known effect of “hallucination” has a special meaning for customer service. Because of the training of chat, bots and other AI customer service deployment, any errors mistakes or other content on which the boats are trained can then show up. A particular case of the ramifications of such mistakes is that of Air Canada. That airline was sued after its chatbot gave inaccurate information to a passenger in 2022, denying him the ability to apply for a refund for a bereavement fare after his travel. He subsequently sued, and in 2024 the airline lost the lawsuit, the court ruling that Air Canada deployed the chatbot and therefore was responsible for what it relayed to customers (Yagoda 2024).

Retailer content can lead to conflicting or inaccurate information for customers. Holmes and Brewer (2020) found that firms in several retail sectors (e.g., sporting goods, department stores, and auto parts) featured vague language in their online customer service content. For example, order fulfillment was variously promised to be completed “usually” within a certain period of the order being placed, or “as soon as we can” (Holmes and Brewer 2020). If chatbots and other AI customer service elements are trained on such content, the organization could be building in the potential for AI hallucination.

Study

In our planned study, we seek to describe problematic retailer content that could lead their AI deployments to fail in providing good customer service. Using Holmes and Brewer's (2020) approach, we aim to discover 1) how pervasive the problem of vague language is on retailer customer-facing websites and 2) whether deployed AI customer service elements, such as interactive chatbots, include such content in their makeup. Further, we plan to offer an approach to interacting with such customer service AI that can help both users and designers overcome some of the hallucination issues researchers have found to date.

Holmes and Brewer (2020) report that, in the case of vague language users need to know that others may use such imprecise language either inadvertently or purposefully. The same lessons described in their study would apply here if chatbots trained on vague language are indeed being deployed--users need to know how to ask questions to get around the poor training and 2) designers need to know how to train chatbots better by avoiding incorporating the vague language.

In our study we will review retailer customer-facing websites to determine if the problems Holmes and Brewer (2020) describe are still present and then, for those retailers deploying customer service chatbots, ask the bots about the various customer service policies on the website. We will then compare the website content with the chatbot answers and determine how much the latter are affected by that content. The data collection protocols will be complete in early fall and data collection will be carried out throughout the fall of 2025.

Summary

AI deployments in customer service are growing rapidly. Learning how to ensure appropriate training takes place to avoid poorly serving customers is of utmost importance. That training, as well as designing and relating better AI prompt protocols for users, will help every stakeholder obtain the advantages that AI promises.

References

- BBC.com, 23 February 2024. <https://www.bbc.com/travel/article/20240222-air-canada-chatbot-misinformation-what-travellers-should-know>
- Colin, Chris (2025), That Dropped Call with Customer Service? It Was on Purpose. The Atlantic, June 29, 2025.
- Ferraro, Carla, Vlad Demsar, Sean Sands, Mariluz Restrepo, and Colin Campbell (2024), The paradoxes of generative AI-enabled customer service: A guide for managers. Business Horizons, Volume 67, Issue 5.
- Hannigan, Timothy R., Ian P. McCarthy, and Andre' Spicer (2024), Beware of bot****: How to manage the epistemic risks of generative chatbots. Business Horizons, Volume 67, Issue 5.
- Holmes, Terence L. and Edward C. Brewer (2020), "Customer Service Challenges in Omni-Channel Retailing—An Exploratory Study of Vague Language in Retailer Customer Service Policies," Atlantic Marketing Journal: Vol. 9 : No. 1
- Murray, Conor (2025), Why AI 'Hallucinations' Are Worse Than Ever. Forbes, May 06, 2025.
- Robertson, Jeandri, Caitlin Ferreira, Elsamari Botha, and Kim Oosthuizen (2024), Game changers: A generative AI prompt protocol to enhance human-AI knowledge co-construction. Business Horizons, Volume 67, Issue 5.
- Yagoda, Maria (2024), Airline held liable for its chatbot giving passenger bad advice - what this means for travellers

Full Paper

How to Read an Image Like Text: Transferring Key Measures from Text to Image

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This paper advances unstructured data analysis in marketing by extending established text analysis constructs—readability, concreteness, and uniqueness—to image analysis. Grounded in visual theories such as Gestalt Psychology and Visual Complexity Theory, the approach addresses a critical gap in understanding visual content effectiveness. The measures are validated using a baseline V3D image dataset and a real-world Kickstarter dataset, demonstrating applicability across research and practice. The study also introduces the Image Metrics Calculator, an accessible online tool that operationalizes these measures for rapid, consistent image evaluation. By aligning image and text analysis frameworks, this research offers marketing scholars and practitioners a unified method to enhance communication effectiveness, inform creative strategies, and improve performance in multimodal marketing contexts.

Introduction

The advent of new methods to analyze unstructured data has opened entire new areas of inquiry in marketing and related fields. These methodologies have also transformed the managerial practice of marketing, allowing organizations to draw novel insights from data which are abundant but difficult to analyze at scale using traditional methods. In the marketing literature, the vast majority of research involving unstructured data has focused on textual information (Berger et al. 2020; Boegershausen et al. 2022; Godes and Mayzlin, 2004) from sources such as product reviews (Allard et al. 2020; Ghose and Ipeirotis, 2011; Watson et al. 2018) and social media posts (Borah et al. 2020; Kanuri et al. 2018; Leung et al. 2022). A hallmark of this literature is the application of constructs drawn from robust theoretical frameworks developed in fields like linguistics and psychology. Concepts such as readability (ease of understanding), concreteness (Begg, 1972; Berger and Heath, 2007; Warren et al. 2021), and uniqueness (Cheema and Kaikati, 2010; Lovett et al. 2013; Warren et al. 2021) are examples of theoretically-grounded constructs which have proven central to various lines of inquiry involving word-based communications, including studies of perception, persuasion, and construal.

More recently, the marketing literature has witnessed a surge in research related to image and video content which has brought the analysis of imagery to the fore alongside text (Dzyabura and Peres, 2021; Hartmann et al. 2021; Zhang et al. 2021). The scrutiny of image content remains largely confined to visual attributes such as color, intensity, brightness, and aesthetic style (Chan and Park, 2015; Gorn et al. 1997, 2004; Stillman et al. 2020; Valdez and Mehrabian, 1994). While these aspects are clearly germane to the context of imagery, many lack substantial theoretical backing to guide research and are closer to perceptual constructs. Moreover, the theoretically-grounded constructs employed in text analysis are largely unavailable to investigators interested in imagery since their translation and application to the domain of images is non-trivial. This has limited progress in the analysis of images by preventing scholars with a background in theories of word-based communications from extending their inquiries readily into the realm of images.

Our goal in this article is to develop a set of measures for images which allow researchers and practitioners to assess several constructs which play a prominent role in theories of word-based communications. We focus on three pivotal measures — ease of understanding, concreteness, and uniqueness—which have been employed in numerous text-based studies. These constructs have all been shown to significantly affect communication effectiveness, including in a marketing context, yet they are applied only sparingly or not at all in image-based

analyses. We refer to existing visual theories in design and psychology to explain how these three measures also embody measures of key visual theories such as Gestalt Psychology (Köhler, 1967) and Visual Complexity Theory (Donderi, 2006). Prevailing theories and findings from textual studies generally advocate for high readability, low uniqueness, and high concreteness to enhance the performance of textual information, although these conclusions differ based on context and, in the cases of concreteness and uniqueness, remain open to considerable theoretical debate. Given their significant influence on communications effectiveness, even when these constructs are not the central focus of a given investigation, they are often necessary or desirable covariates. Moreover, adapting text measures for image analysis not only ensures greater impact and relevance but also directly aligns with the dynamic nature of multimodal communication in the modern era (Grewal et al. 2021; Stephen and Lamberton, 2016), effectively catering to diverse audience preferences and facilitating a more nuanced understanding of information across various modalities. By providing and validating analogs of these measures for images, we aim to assist investigators in leveraging existing theoretical insights in this new domain.

The centerpiece of our investigation is the development of an online app which operationalizes these measures and enables users to easily obtain scores on each dimension for any uploaded image. The app also provides a percentile ranking for each image, in the form of color-coded system, within a baseline dataset. The baseline context is informed by the comprehensive V3D dataset (Wang et al. 2023) which stands as a contemporary standard, akin to ImageNet (Krizhevsky et al. 2017; Russakovsky et al. 2015) earlier. It serves as the visual counterpart to the Google News (Brants and Franz, 2006) dataset in text-based studies, representing the overall context for American English. The V3D dataset reflects a vast array of internet imagery, comprising 245 thousand images and 1.75 million labeled objects across 13,029 categories.

In addition to providing scores relative to the baseline context, the design of the app also recognizes the context-dependent nature of these measures in many applied research and practitioner scenarios—an image which is unusual in one context may be quite common in another. The ability to produce context-specific measures addresses a key concern in the linguistics literature about the role that the setting plays in determining the nature of concepts such as readability, concreteness, and uniqueness.

This paper offers important contribution to both theory and practice. We extend the line of inquiry involving visual theory by incorporating text-based measures in the analysis of images. This moves image analysis away from technical visual criteria like temperature, graininess, edge metrics, and so on and introduces image measures that are grounded by marketing constructs similar to those used in text analysis. It thereby extends these marketing constructs into the realm of images. Additionally, at a time when multimodal communication is ubiquitous, this drastically enhances the ability of practitioners to evaluate images and text on the same constructual playing field and change their mix to enhance effectiveness.

We provide academics and marketers with an online tool to help them identify and rectify suboptimal images. Earlier studies on images employed techniques such as eye tracking and assessments conducted by human coders with limitations on scalability, replicability, and uniformity, among others. Previous research has assessed effects on only text of the effects of readability, concreteness, and uniqueness (Warren et al. 2021). In contrast we show that images can be objectively measured using robust marketing constructs. In our use case, we find that high ease of understanding and high concreteness significantly enhance crowdfunding success, in contrast to the use of unique images. If marketers want to enhance their communications, they can do so by tweaking the constructs of the image in similar ways to text.

Theoretical Background And Focal Constructs

Visual Marketing

Visual marketing is a complex interdisciplinary domain with theories originating at the intersection of vision science, social psychology, and cognitive psychology (Wedel and Pieters, 2007). Vision science itself has origins in cognitive science, computer science, and neuroscience (Palmer, 1999). Visual marketing encompasses all commercial and noncommercial visual signs and symbols associated with brands and used to deliver marketing

messages, including logos, point-of-purchase materials, packaging, website design, and advertising (Pieters et al. 2010). Although, visual marketing covers all visual stimuli—both pictorial and textual—there is a clear distinction between images, which convey information directly, and text, which typically represents its verbal counterpart.

The distinction between images and text is important because studies have shown that visual and textual information are processed by different systems in the brain—the visual system and the language system respectively (Graber 1996). Studies have shown that individuals tend to prioritize visual information faster than textual information (Graber, 1996; Jia et al. 2014) and that images draw more attention than textual information (Jenkin and Harris, 2001). Researchers have also analyzed how individuals process information through analytic and experiential cognitive systems and found that imagery is often processed in a more experiential, intuitive fashion (Slovic 2007). Compared to textual information, imagery typically generates stronger physiological (Childers and Houston 1984) and emotional reactions (Amit and Greene 2012; Holmes et al. 2008; Kensinger and Schecter 2006). Images can also help establish an emotional tone that may be lost in the absence of face-to-face interaction (Kaye, Malone, and Wall 2017). In fact, many observers have argued that advertising is for the most part communicated visually, despite the presence of textual or verbal information (Babin and Burns 1997; Henderson et al. 2003; Kirmani and Zeithaml 1993; LaBarbera, Weingard, and Yorkston 1998).

As these studies illustrate, a growing academic literature examines how information conveyed through various forms of media influences the performance of marketing campaigns. This literature includes studies on the readability, complexity, and sentiment of textual information (Allison et al. 2015; Dorfleitner et al. 2016; Gao et al. 2018; Herzenstein et al. 2011), as well as the role of images—from the mere presence of images to their perceived attractiveness and trustworthiness (e.g., Bohme and Potzsch 2010; Duarte, Siegel, and Young 2012; Ravina 2019). However, despite the attention given to both text and images, most studies in marketing have focused on the textual side (Geise and Baden 2015; Griffin 2001; Hartmann et al. 2021; Schill 2012). As a result, marketing constructs, measures, and methods for text analysis have developed much more rapidly in comparison to those used in image analysis. Hence, additional research is needed on the aspects of that imagery that play a role in shaping cognitions and behavior. This need is ever more pressing due to the growing importance that imagery plays in marketing, especially in an online environment (McQuarrie and Mick 1999; Unnava and Burnkrant 1991; Walter and Gioglio 2020)

Researchers on the image side have built on relevant theories such as Gestalt psychology (Köhler 1967), which emphasizes how individuals perceive and organize visual elements into a cohesive whole, and visual complexity theory (Donderi 2006; Pieters et al. 2010), which posits that images are more complex when they contain less redundancy, meaning that more unique and less common elements contribute to increased complexity. The assessment of image characteristics has primarily relied on methodologies like eye-tracking (Wedel and Pieters 2000) and human based coding (Amit et al. 2009; Hou et al. 2017). A few recent studies have also incorporated deep learning techniques to extract image attributes (Dew et al. 2022; Dzyabura and Peres 2021; Li and Xie 2020; L. Liu et al. 2020). In Table 1, we provide a synopsis of methods used in image analysis.

Table 1: Methods Used in Image Analysis

	Research Topic	Approach	Advantages	Limitations
Survey Involving Human Participants				
Hou et al. 2017	Effect of types of names on food pictures in restaurant menu on consumers’ attitudes and behavioral outcomes.	Collecting feedback from human participants using a Likert scale.	• Inclusion of diverse and subjective perspective. • Design flexibility to address specific questions • Cost effective • Useful for qualitative and quantitative data analysis	• Issues around subjective and bias of respondents • Scalability and repeatability concerns • Misinterpretation of questions.
Amit et al. 2009	Effect of image vs text on distant objects.	Data gathered from human experiments using on reaction time measurements		
Eye Tracking / FMRI				
Chan et al. 2018	Brand imagery mapping using social imagery and brand visuals	Using visual cues to generate brand profiles.	• Allows mapping	

Pieters et al. 2010; Wedel and Pieters, 2000	- Visual Complexity - Eye fixation study based model on advertising effectiveness.	Image Size to measure visual complexity. Human coding to measure design complexity. Eye tracking method	- Precise information on timing and visuals - Direct behavioural data without bias in interpretation	- Time consuming and requires access to expensive equipment. - Scalability concerns - Qualitative inputs cannot be obtained
Machine Learning-Based Methods				
Dew et al. 2022	Explore logo design and brand identity from a data-driven perspective.	Feature extraction methods used to gather data from company logos	- Scalable - Cost effective - Speed	- May not be suitable where qualitative inputs are required. - High computational power requirement.
Dzyabura and Peres, 2021	Machine learning based brand perception model	User generated content creation of brand visuals followed by machine learning based brand perception model		
Liu et al. 2020	Machine learning based brand perception and predictive model			

To date, there has been little effort to date to develop common measures across image and text analysis. In this paper, we bridge this gap by introducing image versions of well-established, theoretically-grounded text attributes—ease of understanding, uniqueness and concreteness.

Ease of Understanding

Achieving clarity is perhaps the most critical aspect of effective communication. The readability of text can be defined as the “ease of understanding or comprehension due to the style of writing” (Klare 1963, p. 15). Other definitions include “the extent to which (a group of) readers understand it, read it at an optimal speed, and find it interesting” (Dale and Chall 1949, p. 19). Readability has been emphasized in research across many fields, including healthcare (Badarudeen and Sabharwal 2010; Control and Prevention 1999; Nielsen-Bohlman et al. 2004), finance (Copeland and Fredericks 1968; Luangaram and Wongwachara 2017; Smith and Smith 1971), general academic writing (Gonsalves et al. 2021; Lee and French 2011; Warren et al. 2021), politics (Bigi 2013; Kayam 2018; Savoy 2018), and in the practice of marketing (Bauerly et al. 2006; Stewart 2002).

Similar to how some text is more readable than other text, images also vary in terms of how easy they are to understand. Images can be perceived differently depending on their complexity, clarity, and the viewer's background knowledge (Bell 2012). When images are difficult to comprehend, it can lead to misinterpretation or confusion. At times, poorly designed graphics or misleading visuals can convey unintended messages, hindering effective communication. On the other hand, the right image not only strengthens the user connection (Babin and Burns 1997) but also fosters increased purchase intentions (Park et al. 2005). Ambiguous visuals, intricate details, or abstract concepts are some of the factors that may pose challenges to the viewer's understanding. Ease of understanding is especially important in e-commerce, where users can only interact with images in lieu of the actual product (Jai et al. 2021; Li and Xie 2020; Petit et al. 2019; Roggeveen et al. 2015).

Researchers have measured the readability of text using a number of methods including the Gunning Fog Index (Fog), the Flesch score, the automated readability index (ARI), and the measure of gobbledygook or SMOG score (Armstrong 1980; Crosier 2004; Flesch 1948; Gunning 1952; Metoyer-Duran 1993). While these measures are useful for understanding textual elements, how do we measure the ease of understanding or “readability” of images?

Extant research on the assessment of images has primarily focused on readily discernible aspects like dimensions, color, gradients, graininess, sharpness, and the characteristics of elements within the image (Bleier et al. 2019). However, there is still a lack of theoretical measurement of images for aspects such as clarity and the ease of comprehension. Just as a well-structured and readable text facilitates effective communication, an image designed for ease of understanding enhances visual communication. As seen above, both readability in text and ease of comprehension in an image strive to eliminate ambiguity and create an environment where information is accessible

and easily absorbed by the audience. The ultimate aim is to foster clear and effective communication, whether conveyed through written words or visual elements.

As elaborated upon below, we measure the ease of comprehension of an image using an object-based methodology analogous to the Gunning Fog Index. We expect that the ease of understanding of images will significantly enhance communication efficacy, particularly when paired with textual clarity. Our approach is aimed at optimizing the overall understandability of communication materials, which increasingly involve a combination of textual and visual elements.

Uniqueness

Uniqueness is fundamental to marketing. Snyder and Fromkin's (1977) theory of uniqueness highlights the human drive to differentiate from others. Uniqueness and differentiation have been studied in areas ranging from identity and branding (Goldfarb and Tucker 2011; Park et al. 2008) to social media and word of mouth (Berger 2014; Cheema and Kaikati 2010). Consumers' need for uniqueness is an individual-level trait that causes some people to seek greater differentiation than others (Lynn and Harris 1997; Snyder and Fromkin 2012; Tian et al. 2001). High uniqueness consumers have been shown to prefer more innovative products (Lynn 1992; Snyder 1992; Snyder and Fromkin 2012) and more distinct product designs (Bloch 1995). From a managerial perspective, uniqueness in marketing materials and imagery reflects the marketing goal of presenting products or brands in distinctive ways to stand out.

The concept of uniqueness in visual marketing is informed by both visual complexity theory and Gestalt theory. Visual complexity theory posits that uncommon images are perceived as more complex. Uniqueness may manifest itself in novel visual elements, unconventional design, or distinctive branding. While these aspects make imagery less ordinary, they also contribute to the visual complexity of marketing materials. Gestalt theory, which emphasizes holistic perception, contributes to our understanding of uniqueness by highlighting how individual design elements interact to create a cohesive and distinctive whole. Creating a unique and memorable visual identity involves adhering to the principles of Gestalt psychology, ensuring that the overall perception is greater than the sum of its parts. Both theories underscore the crucial role of uniqueness in capturing consumer attention and creating a memorable brand image within the marketing landscape. However, the downside is that the image may become more complex and difficult to understand. Hence uniqueness tends to work against the readability of the image.

While uniqueness has been measured in text-based communications (Warren et al. 2021), we provide a parallel measure to capture image uniqueness using an object-detection-based deep-learning method. We predict that the use of unique elements in an image will reduce its effectiveness. This is in line with the findings of Warren et al. (2021) in which the use of unique words or jargon reduces writing effectiveness.

Concreteness

Many studies in the marketing and psychology literatures underscore the importance of concreteness as an aspect of information representation (Holmes and Holmes 1976; Moeser 1974; Nisbett et al. 1976; Yang et al. 2018). Conceptually, concreteness refers to the ease with which an individual can recognize a stimulus as a perceptible entity (Brysbaert et al. 2014). Concrete concepts refer to things we can directly experience through our senses, like seeing, touching, tasting, smelling, or hearing. For instance, a barking dog, a juicy watermelon, or the sound of rain on a roof are all concrete concepts, whereas noise, taste, and weather are more abstract. Concrete representations such as feeling the warmth of sunlight on one's face, hearing the sizzle of bacon in a pan, or smelling the aroma of fresh flowers are more specific than a vague expression like a lovely day. Observe that concreteness differs from uniqueness in that both the more concrete (warmth of sunlight) and more abstract (lovely day) representations may be commonly or uncommonly encountered. It is the level of abstraction that determines concreteness. Figure 1 provides an illustration of concrete and abstract images.

Figure 1: Examples for Concrete (Elephant – Little Diversity, Low Dispersion) Images and Abstract Images (Happiness – Greater Diversity, High Dispersion)



(Keihla et al. 2014)

In the literature, more concrete information is thought to be easier to comprehend, learn, recall, classify, and imagine than more abstract information (e.g. Borghi et al. 2017; Borghi and Binkofski 2014; De Groot and Keijzer 2000; Schwanenflugel et al. 1992; Schwanenflugel and Stowe 1989). More concrete information has also been shown to activate stronger associations with actions and emotions (Dove 2009) and is more attached to sensory experiences (Fernandino et al. 2015). All of these aspects suggest that concrete information may be more efficient for receivers of marketing communications to process (Begg 1972; Kiehl et al. 1999).

While past research has predominantly focused on measuring the concreteness of textual content (Duan et al. 2021; Lee et al. 2021; Mishra and Mishra 2010), our approach translates this textual framework to measure image concreteness. We parallel the methodologies used for text concreteness and aims to bridge the gap to provide a comprehensive understanding of the impact of concrete or abstract in multimodal brand communication.

While visual complexity theory (Donderi 2006; Pérez-Sobrino et al. 2019; Pieters et al. 2010) suggests that images with less redundancy are more complex, the concreteness construct adds a nuanced perspective by emphasizing how dispersion influences complexity. Concreteness aligns with visual complexity theory's simplicity notion, but brings a unique focus on the variability of images associated with concrete concepts.

In comparison to design complexity (Pieters et al. 2010), which considers factors like quantity, irregularity, and dissimilarity, our concreteness construct complements these notions by highlighting the lower dispersion associated with concrete concepts. While both address complexity, concreteness provides additional insights into the diversity of visual representations tied to specific concepts.

Our concreteness construct is based on dispersion and gauges the variability in images associated with a concept, complementing feature complexity, which evaluates the detailed and colorful aspects within individual images. We predict that concreteness will have a positive impact on image effectiveness. This is in line with the design complexity findings by (Pieters et al. 2010) which defines design complexity as the details of shapes and sizes in an image and shows that high design complexity aids in attention to the image and advertisement. Next, we proceed to the specifics of our methodological approach.

Method Overview

In this section, we describe the essential techniques and tools, including the two-stage object-detection methods used in our study. These methods are employed to analyze and quantify three key image attributes: ease of understanding, concreteness, and uniqueness, which have been adapted from textual constructs.

Empirical measurements of images have recently involved text-based methods like utilizing Latent Dirichlet Allocation (LDA) after converting image tags into text, followed by subjecting them to topic modeling. A specific example is found in the work of Dzyabura and Peres (2021), in which images are measured by treating each collage as a document and each tag as a word, employing LDA for topic modeling analysis. We adopt a parallel approach. Just as words are fundamental units in text, we consider objects within an image as the fundamental components. We utilize a transformer-based object detection model (DETR) trained on a large vocabulary dataset to carry out object detection. This helps to deploy marketing theories onto images just as one would to textual content.

Contrasting with the certainty of words in texts, object detection is probabilistic. Hence, the certainty of each object's presence influences its weighting when constructing image-level measurements from object-specific data.

We first pretrain the object detection model on a large vocabulary dataset, V3D (Wang et al. 2023), that is specifically developed for the object detection task. Here, large vocabulary means the training dataset contains a large number of annotated object classes. Using a large vocabulary dataset is essential because it ensures that the model is able to detect rare objects in life. There are popular datasets like MNIST (LeCun et al. 1994), BSDS (Martin et al. 2001), Caltech 101 (Fei-Fei et al. 2006), Imagenet (Russakovsky et al. 2015), MS COCO (Lin et al. 2014), etc. However, V3D surpasses them by having over 215k annotated images spanning 13,029 categories, making it ten times larger than the next-closest option (Gupta et al. 2019). Additionally, the V3D dataset provides a hierarchical category tree that annotates the inclusive relationships among categories. The V3D repository provides several pretrained models (<https://github.com/V3Det/mmdetection-V3Det/tree/main/configs/v3det>). We pick the best performing version “SWIN-B, Deformable-DETR” for object detection in this paper. This version uses a SWIN Transformer (Z. Liu et al. 2021) as the backbone to extract features from the image and then uses a Deformable-DETR model (Zhu et al. 2020) to detect objects. We introduce this model as follows.

Stage I: Feature Extraction

Given an input image, we use a SWIN-Transformer (Liu et al. 2021) (called a “backbone”) to extract a feature map [Equation], where H and W denote the height and width of the image and C the number of channels. Compared with prior object detection models which typically use a Convolutional Neural Network (CNN) as the backbone, a SWIN-Transformer performs better (Liang et al. 2021; Z. Liu et al. 2021, 2022) because it provides a greater ability to model long-range dependencies in an image than typical CNNs, which are limited by their convolutional kernels’ local receptive fields.

Stage II: Multi-head Attention using Deformable-DETR.

The feature map [Equation] is then fed into a Deformable Transformer to learn global information of the image and make predictions. The Deformable Transformer has two parts: the decoder and encoder. The feature map [Equation] first goes through the encoder which outputs a new feature map [Equation] where [Equation] is the size of hidden embedding. Then, the decoder takes as input the new feature map [Equation] and [Equation] object queries [Equation]. [Equation] is a hyper-parameter defining the number of predictions. That is, the decoder will always predict [Equation] possible objects regardless of the content of the image (i.e., making a “set prediction”). [Equation] is set to be much larger than the possible number of objects in an image (in our case, [Equation]). Each prediction has two parts [Equation] where [Equation] is the class label of the object and [Equation] is the bounding box of the object. [Equation] can be [Equation], indicating “no object” detected for this object class. For example, if an image contains 10 objects, then a perfect prediction will have 10 [Equation] being the correct label and the rest 290 [Equation] being [Equation]. The loss function is defined as [Equation] where [Equation] is the probability of the class label being [Equation], and [Equation] is the loss of the bounding boxes.

To capture probability of an object, i.e. the confidence that the model identifies the object, we opt for a threshold-based approach (Wenkel et al. 2021; Yoon et al. 2019) to filter out objects. In this paper, we consider 10% as the threshold. All objects identified below a 10% confidence level have been filtered out. The objects thus identified are then used for the computation of the measures for ease of understanding, concreteness and uniqueness as described below.

Ease of Understanding

For the computation of the ease of understanding or comprehension measure, we adapted the Fog index measure of readability of text onto images. Here, we employed a definition similar to the Fog Index used in textual analysis. Just as words are the units for textual calculation, we use objects as the unit measure for images. For images, our computed "Image Fog Index" is calculated as follows: [Equation] where [Equation], [Equation]

Uniqueness

Just as above, we use objects as the unit of measurement for images to mirror words in the case of textual calculation. First, we calculate the uniqueness of each object, and then the uniqueness score of the image is defined as the average uniqueness score of the objects it contains. It is worth noting that the uniqueness of an object is ‘contextual’—i.e. it depends on the collection of images that the focal image belongs to. This retains the essence of the relative nature of uniqueness in the measurement.

Step 1: Count the occurrence of object [Equation] in the context, denoted by [Equation]

Step 2: Normalize the occurrence [Equation] by dividing it with the largest occurrence value, which gives us a value between 0 and 1. [Equation]

Step 3: The frequency of an image [Equation], [Equation], is defined as the average occurrence of all its containing objects [Equation] where [Equation] is the number of detected objects in image [Equation].

As mentioned earlier, the context has a significant impact on the frequency. For example, a lancet is typically rare to see in everyday life, but in a collection of medical images, it may be much more common. To address this issue, we computed two versions of image uniqueness: the general version using the V3D dataset, which is used for the design of the online app, and a more specific Kickstarter version, which is used for the empirical analysis in the specific use case on crowdfunding performance in the following section. For the general version, we count the occurrences from the V3D training dataset. Since the V3D dataset is a general-purpose dataset collected from internet similar to the Google News Corpus dataset for text, it is less domain-specific and can be viewed as a good starting point for situations where the user cannot provide their own context. For the Kickstarter version, we only count object occurrences from the full Kickstarter image dataset.

Concreteness

Following the same object-based approach, we proceed to compute image concreteness. In our object-based approach, we first calculate the concreteness score of each object and then aggregate object-level concreteness to arrive at image concreteness.

To measure concreteness, we adapt a concreteness-construct based on dispersion as proposed by Hessel et al. (2018) and Kiehl et al. (1999). This construct suggests that diversity of images associated with a concept is influenced by its level of concreteness. In other words, if a concept is concrete, the images associated with it will exhibit lower dispersion whereas if the concept is abstract, the dispersion would be higher. Consequently, images related to ‘elephant’, ‘wooden chair’, etc would demonstrate less variability and contain images of elephants and wooden chairs respectively. On the other hand, images associated with ‘happiness’ or ‘serene’ may contain images of sunsets, flowers, or many other options to denote the concepts (Hessel et al. 2018; Kiehl et al. 1999). Thus, the Mutual Neighboring (MNI) metric of concreteness captures the dispersion-based concreteness or abstractness via the “clusteredness” of an object—if an object only appears in a specific set of images (its distribution is more clustered), it tends to be more concrete. In contrast, if an object appears in almost every image (its distribution is less clustered), it is less concrete. The MNI method is summarized as follows.

Denote [Equation] as the set of objects contained in image [Equation] and [Equation] as the set of images that have object [Equation]. For example, if the [Equation] image depicts a woman wearing a necklace, then [Equation] might be [Equation].

Given any object, [Equation], its MNI score is defined as: [Equation] where [Equation] denotes the set of [Equation]’s [Equation] nearest neighbors in image space. We further normalize [Equation] by dividing it by [Equation], where [Equation] is the number of total images in the dataset. To find the [Equation] nearest neighbors of an image, we first represent every image with an embedding vector generated by the Mask-RCNN model. The [Equation] nearest neighbors are then obtained by Annoy (Spotify/Annoy 2021), a Python package tailored for efficient lookup of similar points in a high-dimensional embedding space. In our main analysis, we use $k=100$. The final concreteness score of any given image is defined as: [Equation]

Consistency with Human Perception

Before we delve into a use case based on a real-world marketing context to show the relevancy of our proposed metrics to marketing research and practice, we conduct a human survey on Prolific for 100 randomly selected images from the baseline V3D dataset among 100 respondents.

We asked them to rate the images on: (i) perceived ease of understanding for the image, (ii) perceived uniqueness of the image, and (iii) perceived concreteness of the image. Each image has been rated three times and we take the average rating.

We find that all of the three metrics we proposed are correlated with the survey results from the human subjects as expected: 1) perceived ease of understanding is negatively correlated with image-fog index, 2) perceived uniqueness is negatively correlated with frequency, and 3) perceived concreteness is positively correlated with MNI-based concreteness, affirming the metrics' alignment with human judgment in image evaluation.

Web Appendix 1 provides a detailed illustration of the survey we conducted with human subjects.
Use Case: Image Metrics And Crowdfunding Performance

In this pivotal section, we delve into the practical application of our three adapted metrics for image analysis. Our primary objective is to showcase the utility of these measures for marketing scholars, particularly in resolving complex theoretical dilemmas. Here, we explore the nuanced landscape of information representation in crowdfunding.

Prevailing theories and findings from textual studies typically advocate for high readability (Berger et al. 2020; Ghose and Ipeirotis, 2011; Warren et al. 2021), low uniqueness (Netzer et al. 2012; Pieters et al. 2010; Pieters and Wedel, 2004; Warren et al. 2021), and high concreteness (Charbonnier and Wartena 2019; Duan et al. 2021; Mishra and Mishra 2010; Pieters et al. 2010) to enhance the performance of textual information. Avoiding complexity in advertising aids in cognition (Pérez-Sobrinó et al. 2019). At the same time, we acknowledge that in more substantive contexts, local theories might present contrasting perspectives (Aknin et al. 2015; Borghi et al. 2017). Construal Level Theory (CLT) (Fujita et al. 2006; Kim et al. 2009; Trope and Liberman, 2010), which emphasizes the psychological distance between crowdfunding projects and investors, clashes with traditional expectations, especially regarding the role of concreteness in project performance. In particular, the outcome of the project is psychologically distant from potential investors spatially (they cannot examine the product), temporally (the delivery date is both in the future and uncertain to occur at all), and socially (investors typically do not know the entrepreneurs or much about their history). This creates a compelling backdrop for our investigation where it is unclear whether more concrete or more abstract images will perform better.

This creates a compelling backdrop for our investigation. The key elements in most reward-based crowdfunding projects include a title, a cover image, a text description, a funding goal, and a funding period. Potential investors base their decision on whether and how much to invest in a project on the project description. Typically, reward-based crowdfunding projects use an all-or-nothing reward system. If the campaign succeeds in reaching the goal amount within the funding period, the entrepreneurs get the money; otherwise, the campaign fails, and the investors get their money back. During the funding period, the campaign page provides updates of the pledged amount.

In reward-based crowdfunding, the entrepreneurs offer rewards ranging from a simple thank-you note to a bundle of products based on each investor's pledged amount. In this paper, we focus on the largest reward-based crowdfunding platform, Kickstarter, which launched in 2009 and which follows the all-or-nothing funding principle. Since the year 2000, it has launched more than 500,000 projects worth more than \$5.43 billion. Although most successful projects have a goal below \$10,000, some 792 projects have raised upwards of one million dollars (Kickstarter Stats 2023). Yet, the success rate of projects reaching their goal is only 41 percent (Kickstarter Stats 2023). As the only source of information for potential investors, the design of the project description and imagery is extremely important for entrepreneurs.

The dataset consists of 3,593 projects from 2013 to 2019 across product design and accessories categories. We took into account the main profile photo of each project and measured it for ease of understanding, uniqueness and concreteness. The logged pledged amount serves as the dependent variable. We carefully selected independent variables, including the innovative image "image-fog index," average object frequency, and average concreteness, all within the Kickstarter ecosystem. To enhance the robustness and validity of our findings, our model integrates an array of covariates. This inclusion not only strengthens our analysis but also ensures a comprehensive understanding of the variables at play. Table 2 provides the summary statistics of our dataset.

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std Dev	Min	Max
Image Fog Index	3,593	18.89	21.93	0.40	136.13
Image Frequency	3,593	0.13	0.09	0.00	0.53
Image Concreteness	3,593	1.9	0.57	0.57	7.55

Our findings, displayed in Table 3, are both revealing and insightful. High ease of understanding in images, as quantified by a low Image - Fog Index (-0.06 , $p < 0.05$), significantly boosts crowdfunding success. At the same time, less unique images, with higher frequency (1.51 , $p < 0.05$), tend to be more successful, resonating with the "jargon" phenomenon identified in text-based studies. Finally, high concreteness in images correlates with increased crowdfunding success (0.41 , $p < 0.01$), a finding that aligns with most textual research yet intriguingly contradicts Construal Level Theory's predictions that more abstract images should be preferred when the project is more "distant" from the viewer. These outcomes remain consistently valid across various hyperparameters for concreteness and readability, underscoring the reliability of our measures.

Table 3: Impact of Image Ease of Understanding, Uniqueness and Concreteness on Funds Raised (Kickstarter Dataset)

DV: [Equation]		
	Coef.	SE
[Equation]	-0.06^{**}	.003
[Equation]	1.51^{**}	.748
[Equation]	0.41^{***}	.104
Text Covariates		
[Equation]	0.061^{***}	0.01
[Equation]	-0.383	.099
[Equation]	-1.96	.117
Project Covariates		
[Equation]	0.25^{***}	.040
[Equation]	0.85^{***}	0.17
[Equation]		
2015	-1.34^{***}	0.22
2016	-1.13^{***}	0.23
2017	1.67^{***}	0.17
2018	0.00^{***}	0.17
[Equation]	$-.007^{***}$	.001
[Equation]	$.684^{***}$	.068
[Equation]	$.233^{***}$	.025
# Observations	3,359	

Note. $*p < .1$; $**p < .05$; $***p < .01$.

App Implementation

In this section, we introduce the Image Metrics Calculator (<http://69.253.235.124:8015>), a significant innovation stemming from our research: an application designed to bridge theoretical research and practical marketing applications. This innovative application is designed to empower researchers and marketing practitioners by providing a sophisticated means to analyze images. Utilizing key measures traditionally applied in text analysis—readability, uniqueness, and concreteness—the app offers a unique approach to evaluating visual content. Its development marks a significant step in the integration of academic insight with real-world marketing strategies, enabling a deeper understanding of visual communication's effectiveness.

The Image Metrics Calculator evaluates images through three critical lenses: ease of understanding, concreteness, and uniqueness. Ease of understanding assesses how easily an image's message is understood, concreteness measures the tangible versus abstract elements, and uniqueness evaluates the distinctiveness of an image in comparison to a vast database of internet imagery. This multi-faceted approach provides a comprehensive assessment, aiding researchers and marketers in understanding and optimizing visual communication effectiveness. The app's sophisticated algorithms offer an innovative way to gauge the impact of an image in the marketing landscape.

The app's operation begins with users uploading an image. Once uploaded, the app employs advanced algorithms to analyze the image and provide three key metrics. Image - Fog Index evaluates ease of understanding, with a higher Image - Fog Index indicating lower ease of understanding. Concreteness measures the degree to which the image represents tangible versus abstract elements. Finally, frequency assesses the image's uniqueness, where a lower frequency implies a more distinctive image compared to a wide range of internet visuals.

Figure 2: Image Analysis Result from the Image Metrics Calculator App

	Score	Percentile (0% to 100%)
Concreteness	28.83	46.58
Uniqueness	0.09337000000000001	80.31
Readability	45.47	100.0

A key feature of the app is its ability to provide percentile rankings for images within the V3D context, along with intuitive color-coded feedback, as in Figure 2. Upon receiving scores, users can interpret them as follows: Red indicates areas where the image underperforms. Consider revisions to enhance concreteness, readability, or reduce uniqueness. Yellow denotes average performance. There's potential for improvement to make the visuals more engaging and clearer. Green reflects effective performance; however, further refinement could enhance impact. Recommendations for improvement are provided based on specific scores in this app. These suggestions aim to optimize the image's effectiveness in communication.

While the definition of concreteness and uniqueness is based on object distribution within a group of images, in other words, context-dependent, we do understand that from case to case both researchers and practitioners are not able to upload a group of images to build a context. In Image Metrics Calculator, the V3D dataset plays a crucial role, providing a baseline for image comparison¹. It is an extensive database of internet imagery, comprising 245k images and 1753k labeled objects across 13,029 categories, offering a broad spectrum for evaluating image uniqueness and concreteness. This dataset allows for a comprehensive and contextual analysis of uploaded images, giving users a clear understanding of how their images stand in comparison to a wide array of existing marketing visuals. This baseline benchmarking is key to understanding an image's effectiveness in the current digital marketing landscape. In addition to the baseline metrics based on the V3D dataset, we recognize that an image's context greatly influences its perception, as an image might be perceived as unique or concrete in one context but common or abstract in another. This dual functionality, featuring an online baseline version, underscores the app's versatility and its potential for significant impact in both academic research and professional marketing applications.

General Discussion and Conclusion

In an ever-evolving marketing era, where visual content dominates social media channels, the impact of images on the reach, engagement, and resonance of user-generated content cannot be overlooked. As platforms increasingly prioritize visual elements, delving into the dynamics of image-driven outcomes becomes essential for both users seeking broader influence and marketers aiming to optimize their communication strategies in this visual-centric landscape. We recapitulate our contributions, introducing crucial metrics for marketers and researchers analyzing images, accompanied by a user-friendly app for immediate application or extensive, context-based analysis. We suggest future transfers of textual measures to image analysis, expanding the research scope and practical marketing applications.

Theoretical Implications

Our paper makes a crucial contribution by bridging the gap in theoretical foundations for visual marketing. While the significance of images in marketing communication, particularly in online environments, has grown exponentially, the theoretical constructs primarily favored in textual analysis have not carried over to the image domain. By introducing image-based measures aligned with well-established text attributes (ease of understanding, uniqueness, concreteness), we aim to level the playing field and offer a more comprehensive framework for assessing visual stimuli.

Next, the adoption of an object-based approach in our methodology aligns with contemporary trends in information processing. Just as words are fundamental units in textual analysis, we consider objects within an image as fundamental components. This not only allows for a parallel with text analysis but also provides a practical and scalable method for empirical measurements of visual content. Further, since our image measures are derived from text measures, this provides a unified measurement framework to evaluate both text and images in any marketing communication.

Managerial Implications

This article presents a comprehensive approach to unstructured data analysis in marketing, particularly focusing on images, and it has several potential managerial implications and applications. First, it provides a framework for marketers to apply text analysis constructs—readability, concreteness, and uniqueness—to image analysis. These constructs are already widely accepted by marketers for textual content and hence can lead to a deeper understanding of consumer perception of visual content, enabling the creation of more effective and engaging marketing strategies. The incorporation of visual theories like Gestalt psychology and visual complexity theory can further refine the design and execution of marketing campaigns by understanding how consumers interpret visual elements.

The practical application of these concepts is demonstrated through the use of a V3D image dataset and a Kickstarter dataset, grounding the approach in real-world data for more accurate decision-making. The introduction of an online app, operationalizing these measures, signifies a leap towards operational efficiency, allowing for streamlined and context-specific evaluations of visual content. This tool is particularly valuable in the modern era of multimodal communication, as it empowers marketers to seamlessly integrate visual elements with other modes of communication.

Moreover, this approach can provide a competitive advantage, especially in industries where visual communication plays a pivotal role. It holds considerable implications for various marketing domains such as social media marketing, advertising, and brand management. The ability to analyze images with text-like constructs not only enhances the relevance and impact of marketing communications but also opens up avenues for personalized marketing strategies based on nuanced consumer insights. In social media marketing, the application of these constructs can enable marketers to craft more compelling visual content that resonates with their audience, enhancing engagement on platforms where visuals are key to communication. The measures of readability, concreteness, and uniqueness can be particularly effective in creating social media posts that are not only eye-catching but also easily understandable and memorable to the audience. Additionally, these principles and tools can be instrumental in training marketing teams, enhancing their capability to analyze and create impactful visual content. Overall, this research equips marketers with a sophisticated framework and practical tools to navigate and leverage the complexities of visual data in marketing effectively.

Limitations and Future Research

This study presents a forward-looking approach to unstructured data analysis in marketing by adapting text analysis constructs for image analysis, offering a theoretically grounded methodology that can enhance the impact and relevance of visual content across contexts. By providing marketers with a sophisticated tool for assessing images, the approach holds potential for developing more effective and engaging strategies; however, its reliance on specific datasets such as the V3D image dataset and Kickstarter dataset may limit generalizability, and its methodological complexity may require specialized skills and training. Moreover, dependence on an online app introduces potential issues with technological functionality, adaptability, and user interface, which could affect practical utility. Future research should examine the approach across more diverse datasets to strengthen generalizability, explore simplification to increase accessibility for marketers with varied expertise, and leverage advancements in technology and interface design to improve usability, ultimately paving the way for more intuitive and user-friendly platforms for image analysis in marketing.

Conclusion

In conclusion, this article makes a substantial theoretical and practical contribution to the marketing domain by pioneering the extension of established text analysis constructs—readability, concreteness, and uniqueness—into the realm of image analysis. This advancement addresses a critical gap in multimodal content research and offers a powerful lens for understanding how visual elements influence consumer perception and behavior. By grounding the approach in robust theoretical frameworks such as Gestalt Psychology and Visual Complexity Theory, the study not only enhances analytical rigor but also ensures relevance to the evolving demands of modern marketing communication. The introduction of a ready-to-use online application further bridges theory and practice, equipping marketers with a versatile, accessible tool for evaluating and optimizing image content across channels. Together, these contributions underscore the transformation of marketing research toward integrated, data-driven methodologies that align with contemporary multimedia landscapes, ultimately enabling more strategic, effective, and engaging marketing strategies.

REFERENCES

- Aknin, L. B., Van Boven, L., and Johnson-Graham, L. (2015). Abstract construals make the emotional rewards of prosocial behavior more salient. *The Journal of Positive Psychology*, 10(5), 458–462. <https://doi.org/10.1080/17439760.2014.967801>
- Allard, T., Dunn, L. H., and White, K. (2020). Negative Reviews, Positive Impact: Consumer Empathetic Responding to Unfair Word of Mouth. *Journal of Marketing*, 84(4), 86–108. <https://doi.org/10.1177/0022242920924389>
- Allison, T. H., Davis, B. C., Short, J. C., and Webb, J. W. (2015). Crowdfunding in a Prosocial Microlending Environment: Examining the Role of Intrinsic versus Extrinsic Cues. *Entrepreneurship Theory and Practice*, 39(1), 53–73. <https://doi.org/10.1111/etap.12108>
- Amit, E., Algom, D., and Trope, Y. (2009). Distance-dependent processing of pictures and words. *Journal of Experimental Psychology: General*, 400–415.
- Armstrong, J. S. (1980). Unintelligible Management Research and Academic Prestige. *Interfaces*, 10(2), 80–86. <https://doi.org/10.1287/inte.10.2.80>
- Babin, L. A., and Burns, A. C. (1997). Effects of print ad pictures and copy containing instructions to imagine on mental imagery that mediates attitudes. *Journal of Advertising*, 33–44.
- Badarudeen, S., and Sabharwal, S. (2010). Assessing Readability of Patient Education Materials: Current Role in Orthopaedics. *Clinical Orthopaedics and Related Research®*, 468(10), 2572–2580. <https://doi.org/10.1007/s11999-010-1380-y>
- Bauerly, R. J., Johnson, D. T., and Singh, M. (2006). READABILITY AND WRITING WELL. *Marketing Management Journal*, 16(1).

- Begg, I. (1972). Recall of meaningful phrases. *Journal of Verbal Learning and Verbal Behavior*, 11(4), 431–439. [https://doi.org/10.1016/S0022-5371\(72\)80024-0](https://doi.org/10.1016/S0022-5371(72)80024-0)
- Bell, P. (2012). Content analysis of visual images. *SAGE Visual Methods: Interpretation and Classification*, 3, 31–57.
- Berger, J. (2014). Word of mouth and interpersonal communication: A review and directions for future research. *Journal of Consumer Psychology*, 24(4), 586–607. <https://doi.org/10.1016/j.jcps.2014.05.002>
- Berger, J., and Heath, C. (2007). Where Consumers Diverge from Others: Identity Signaling and Product Domains. *Journal of Consumer Research*, 34(2), 121–134. <https://doi.org/10.1086/519142>
- Berger, J., Humphreys, A., Ludwig, S., Moe, W. W., Netzer, O., and Schweidel, D. A. (2020). Uniting the Tribes: Using Text for Marketing Insight. *Journal of Marketing*, 84(1), 1–25. <https://doi.org/10.1177/0022242919873106>
- Bigi, A. (2013). Viral political communication and readability: An analysis of an Italian political blog. *Journal of Public Affairs*, 13(2), 209–217. <https://doi.org/10.1002/pa.1476>
- Bleier, A., Harmeling, C. M., and Palmatier, R. W. (2019). Creating Effective Online Customer Experiences. *Journal of Marketing*, 83(2), 98–119. <https://doi.org/10.1177/0022242918809930>
- Bloch, P. H. (1995). Seeking the Ideal Form: Product Design and Consumer Response. *Journal of Marketing*, 59(3), 16–29. <https://doi.org/10.2307/1252116>
- Boegershausen, J., Datta, H., Borah, A., and Stephen, A. T. (2022). Fields of Gold: Scraping Web Data for Marketing Insights. *Journal of Marketing*, 86(5), 1–20. <https://doi.org/10.1177/00222429221100750>
- Bohme, R., and Potzsch, S. (2010). Social Lending aus der Perspektive des Datenschutzes. 12.
- Borah, A., Banerjee, S., Lin, Y.-T., Jain, A., and Eisingerich, A. B. (2020). Improvised Marketing Interventions in Social Media. *Journal of Marketing*, 84(2), 69–91. <https://doi.org/10.1177/0022242919899383>
- Borghi, A. M., and Binkofski, F. (2014). Words as Social Tools: An Embodied View on Abstract Concepts. Springer New York. <https://doi.org/10.1007/978-1-4614-9539-0>
- Borghi, A. M., Binkofski, F., Castelfranchi, C., Cimatti, F., Scorolli, C., and Tummolini, L. (2017). The challenge of abstract concepts. *Psychological Bulletin*. <https://psycnet.apa.org/record/2017-01856-001?doi=1>
- Brants, Thorsten and Alex Franz (2006), Web 1T 5-Gram Version 1 LDC2006T13. Philadelphia: Linguistic Data Consortium
- Brysbaert, M., Warriner, A. B., and Kuperman, V. (2014). Concreteness ratings for 40 thousand generally known English word lemmas. *Behavior Research Methods*, 46(3), 904–911. <https://doi.org/10.3758/s13428-013-0403-5>
- Chan, C. S. R., and Park, H. D. (2015). How images and color in business plans influence venture investment screening decisions. *Journal of Business Venturing*, 30(5), 732–748. <https://doi.org/10.1016/j.jbusvent.2014.12.002>
- Charbonnier, J., and Wartena, C. (2019). Predicting Word Concreteness and Imagery. *Proceedings of the 13th International Conference on Computational Semantics - Long Papers*, 176–187. <https://doi.org/10.18653/v1/W19-0415>
- Cheema, A., and Kaikati, A. M. (2010). The Effect of Need for Uniqueness on Word of Mouth. *Journal of Marketing Research*, 47(3), 553–563. <https://doi.org/10.1509/jmkr.47.3.553>

- Control, C. for D. and Prevention. (1999). Scientific and technical information simply put. Atlanta: Office of Communication, Centers for Disease Control and Prevention.
- Copeland, R. M., and Fredericks, W. (1968). Extent of disclosure. *Journal of Accounting Research*, 106–113.
- Crosier, K. (2004). How effectively do marketing journals transfer useful learning from scholars to practitioners? *Marketing Intelligence and Planning*, 22(5), 540–556.
- De Groot, A. M. B., and Keijzer, R. (2000). What Is Hard to Learn Is Easy to Forget: The Roles of Word Concreteness, Cognate Status, and Word Frequency in Foreign-Language Vocabulary Learning and Forgetting. *Language Learning*, 50(1), 1–56. <https://doi.org/10.1111/0023-8333.00110>
- Dew, R., Ansari, A., and Toubia, O. (2022). Letting Logos Speak: Leveraging Multiview Representation Learning for Data-Driven Branding and Logo Design. *Marketing Science*, 41(2), 401–425. <https://doi.org/10.1287/mksc.2021.1326>
- Donderi, D. C. (2006). Visual complexity: A review. *Psychological Bulletin*, 132(1), 73–97. <https://doi.org/10.1037/0033-2909.132.1.73>
- Dorfleitner, G., Priberny, C., Schuster, S., Stoiber, J., Weber, M., de Castro, I., and Kammler, J. (2016). Description-text related soft information in peer-to-peer lending – Evidence from two leading European platforms. *Journal of Banking and Finance*, 64, 169–187. <https://doi.org/10.1016/j.jbankfin.2015.11.009>
- Duan, R., Takahashi, B., and Zwickle, A. (2021). How Effective Are Concrete and Abstract Climate Change Images? The Moderating Role of Construal Level in Climate Change Visual Communication. *Science Communication*, 43(3), 358–387. <https://doi.org/10.1177/10755470211008192>
- Duarte, J., Siegel, S., and Young, L. (2012). Trust and Credit: The Role of Appearance in Peer-to-peer Lending. *The Review of Financial Studies*, 25(8), 2455–2483.
- Dzyabura, D., and Peres, R. (2021). Visual Elicitation of Brand Perception. *Journal of Marketing*, 85(4), 44–66. <https://doi.org/10.1177/0022242921996661>
- Fei-Fei, L., Fergus, R., and Perona, P. (2006). One-shot learning of object categories. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 28(4), 594–611. <https://doi.org/10.1109/TPAMI.2006.79>
- Fernandino, L., Humphries, C. J., Seidenberg, M. S., Gross, W. L., Conant, L. L., and Binder, J. R. (2015). Predicting brain activation patterns associated with individual lexical concepts based on five sensory-motor attributes. *Neuropsychologia*, 76, 17–26. <https://doi.org/10.1016/j.neuropsychologia.2015.04.009>
- Flesch, R. (1948). A new readability yardstick. *Journal of Applied Psychology*, 32(3), 221.
- Fujita, K., Trope, Y., Liberman, N., and Levin-Sagi, M. (2006). Construal levels and self-control. *Journal of Personality and Social Psychology*, 90(3), 351–367. <https://doi.org/10.1037/0022-3514.90.3.351>
- Gao, Q., Lin, M., and Sias, R. (2018). Words Matter: The Role of Texts in Online Credit Markets. 58.
- Geise, S., and Baden, C. (2015). Putting the Image Back Into the Frame: Modeling the Linkage Between Visual Communication and Frame-Processing Theory. *Communication Theory*, 25(1), 46–69. <https://doi.org/10.1111/comt.12048>
- Ghose, A., and Ipeirotis, P. G. (2011). Estimating the Helpfulness and Economic Impact of Product Reviews: Mining Text and Reviewer Characteristics. *IEEE Transactions on Knowledge and Data Engineering*, 23(10), 1498–1512. <https://doi.org/10.1109/TKDE.2010.188>

- Godes, D., and Mayzlin, D. (2004). Using Online Conversations to Study Word-of-Mouth Communication. *Marketing Science*, 23(4), 545–560. <https://doi.org/10.1287/mksc.1040.0071>
- Gonsalves, C., Ludwig, S., De Ruyter, K., and Humphreys, A. (2021). Writing for Impact in Service Research. *Journal of Service Research*, 24(4), 480–499. <https://doi.org/10.1177/10946705211024732>
- Gorn, G. J., Chattopadhyay, A., Sengupta, J., and Tripathi, S. (2004). Waiting for the Web: How Screen Color Affects Time Perception. *Journal of Marketing Research*, 41(2), 215–225. <https://doi.org/10.1509/jmkr.41.2.215.28668>
- Gorn, G. J., Chattopadhyay, A., Yi, T., and Dahl, D. W. (1997). Effects of color as an executional cue in advertising: They're in the shade. *Management Science*, 43. <https://doi.org/10.1287/mnsc.43.10.1387>
- Graber, D. A. (1996). Say it with Pictures. *The ANNALS of the American Academy of Political and Social Science*, 546(1), 85–96. <https://doi.org/10.1177/0002716296546001008>
- Grewal, R., Gupta, S., and Hamilton, R. (2021). Marketing Insights from Multimedia Data: Text, Image, Audio, and Video. *Journal of Marketing Research*, 58(6), 1025–1033. <https://doi.org/10.1177/00222437211054601>
- Griffin, M. (2001). Camera as Witness, Image as Sign: The Study of Visual Communication in Communication Research. *Annals of the International Communication Association*, 24, 433–463. <https://doi.org/10.1080/23808985.2001.11678997>
- Gunning, R. (1952). The technique of clear writing. (No Title). <https://cir.nii.ac.jp/crid/1130000796418620544>
- Hartmann, J., Heitmann, M., Schamp, C., and Netzer, O. (2021). The Power of Brand Selfies. *Journal of Marketing Research*, 58(6), 1159–1177. <https://doi.org/10.1177/00222437211037258>
- Herzenstein, M., Sonenshein, S., and Dholakia, U. M. (2011). Tell Me a Good Story and I May Lend you Money: The Role of Narratives in Peer-to-Peer Lending Decisions. *Journal of Marketing Research*, 48(SPL), S138–S149. <https://doi.org/10.1509/jmkr.48.SPL.S138>
- Hessel, J., Mimno, D., and Lee, L. (2018). Quantifying the visual concreteness of words and topics in multimodal datasets. arXiv:1804.06786 [Cs]. <http://arxiv.org/abs/1804.06786>
- Holmes, V., and Holmes, V. (1976). Comprehension and recall of abstract and concrete sentences. *Journal of Verbal Learning and Verbal Behavior*, 15, 559–566. [https://doi.org/10.1016/0022-5371\(76\)90050-5](https://doi.org/10.1016/0022-5371(76)90050-5)
- Hou, Y., Yang, W., and Sun, Y. (2017). Do pictures help? The effects of pictures and food names on menu evaluations. *International Journal of Hospitality Management*, 60, 94–103. <https://doi.org/10.1016/j.ijhm.2016.10.008>
- Jai, T.-M. (Catherine), Fang, D., Bao, F. S., James, R. N., Chen, T., and Cai, W. (2021). Seeing It Is Like Touching It: Unraveling the Effective Product Presentations on Online Apparel Purchase Decisions and Brain Activity (An fMRI Study). *Journal of Interactive Marketing*, 53, 66–79. <https://doi.org/10.1016/j.intmar.2020.04.005>
- Jia, J. S., Shiv, B., and Rao, S. (2014). The product-agnosia effect: How more visual impressions affect product distinctiveness in comparative choice. *Journal of Consumer Research*, 41(2), 342–360.
- Kanuri, V. K., Chen, Y., and Sridhar, S. (Hari). (2018). Scheduling Content on Social Media: Theory, Evidence, and Application. *Journal of Marketing*, 82(6), 89–108. <https://doi.org/10.1177/0022242918805411>
- Kayam, O. (2018). The Readability and Simplicity of Donald Trump's Language. *Political Studies Review*, 16(1), 73–88. <https://doi.org/10.1177/1478929917706844>

- "Kickstarter Stats" (2023), (accessed December 12, 2023), available at <https://www.kickstarter.com/help/stats>
- Kiehl, K. A., Liddle, P. F., Smith, A. M., Mendrek, A., Forster and, B. B., and Hare, R. D. (1999). Neural pathways involved in the processing of concrete and abstract words. *Human Brain Mapping*, 7(4), 225–233. [https://doi.org/10.1002/\(SICI\)1097-0193\(1999\)7:4<225::AID-HBM1>3.0.CO;2-P](https://doi.org/10.1002/(SICI)1097-0193(1999)7:4<225::AID-HBM1>3.0.CO;2-P)
- Kim, Y.-J., Park, J., and Wyer, R. S. (2009). Effects of Temporal Distance and Memory on Consumer Judgments. *Journal of Consumer Research*, 36(4), 634–645. <https://doi.org/10.1086/599765>
- Köhler, W. (1967). Gestalt psychology. *Psychologische Forschung*, 31(1), XVIII–XXX. <https://doi.org/10.1007/BF00422382>
- Krizhevsky, A., Sutskever, I., and Hinton, G. E. (2017). Imagenet classification with deep convolutional neural networks. *Communications of the ACM*, 60. <https://doi.org/10.1145/3065386>
- LeCun, Y., Cortes, C., and Burges, C. (1994). MNIST handwritten digit database. <http://yann.lecun.com/exdb/mnist/>
- Lee, S., and French, N. (2011). The readability of academic papers in the Journal of Property Investment and Finance. *Journal of Property Investment and Finance*, 29(6), 693–704.
- Lee, S., Parthasarathi, T., Cooper, N., Zauberman, G., Lerman, C., and Kable, J. W. (2021). The Future is Less Concrete than the Present: A Neural Signature of the Concreteness of Prospective Thought Is Modulated by Temporal Proximity during Intertemporal Decision-Making [Preprint]. *Neuroscience*. <https://doi.org/10.1101/2021.02.13.431095>
- Leung, F. F., Gu, F. F., Li, Y., Zhang, J. Z., and Palmatier, R. W. (2022). Influencer Marketing Effectiveness. *Journal of Marketing*, 86(6), 93–115. <https://doi.org/10.1177/00222429221102889>
- Li, Y., and Xie, Y. (2020). Is a Picture Worth a Thousand Words? An Empirical Study of Image Content and Social Media Engagement. *Journal of Marketing Research*, 57(1), 1–19. <https://doi.org/10.1177/0022243719881113>
- Liang, J., Cao, J., Sun, G., Zhang, K., Van Gool, L., and Timofte, R. (2021). Swinir: Image restoration using swin transformer. *Proceedings of the IEEE/CVF International Conference on Computer Vision*, 1833–1844. https://openaccess.thecvf.com/content/ICCV2021W/AIM/html/Liang_SwinIR_Image_Restoration_Using_Swin_Transformer_ICCVW_2021_paper.html
- Lin, T.-Y., Maire, M., Belongie, S., Hays, J., Perona, P., Ramanan, D., Dollár, P., and Zitnick, C. L. (2014). Microsoft COCO: Common Objects in Context. In D. Fleet, T. Pajdla, B. Schiele, and T. Tuytelaars (Eds.), *Computer Vision – ECCV 2014* (Vol. 8693, pp. 740–755). Springer International Publishing. https://doi.org/10.1007/978-3-319-10602-1_48
- Liu, L., Dzyabura, D., and Mizik, N. (2020). Visual Listening In: Extracting Brand Image Portrayed on Social Media. *Marketing Science*, 39(4), 669–686. <https://doi.org/10.1287/mksc.2020.1226>
- Liu, Z., Lin, Y., Cao, Y., Hu, H., Wei, Y., Zhang, Z., Lin, S., and Guo, B. (2021). Swin Transformer: Hierarchical Vision Transformer using Shifted Windows. *2021 IEEE/CVF International Conference on Computer Vision (ICCV)*, 9992–10002. <https://doi.org/10.1109/ICCV48922.2021.00986>
- Liu, Z., Ning, J., Cao, Y., Wei, Y., Zhang, Z., Lin, S., and Hu, H. (2022). Video swin transformer. *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition*, 3202–3211. http://openaccess.thecvf.com/content/CVPR2022/html/Liu_Video_Swin_Transformer_CVPR_2022_paper.html

- Lovett, M. J., Peres, R., and Shachar, R. (2013). On brands and word-of-mouth. *Journal of Marketing Research*, 50(4), 427–444.
- Luangaram, P., and Wongwachara, W. (2017). More than words: A textual analysis of monetary policy communication. *PIER Discussion Papers*, 54, 1–42.
- Lynn, M. (1992). The psychology of unavailability: Explaining scarcity and cost effects on value. *Basic and Applied Social Psychology*, 31(1), 3–8.
- Lynn, M., and Harris, J. (1997). The desire for unique consumer products: A new individual differences scale. *Psychology and Marketing*, 14(6), 601–616. [https://doi.org/10.1002/\(SICI\)1520-6793\(199709\)14:6<601::AID-MAR5>3.0.CO;2-B](https://doi.org/10.1002/(SICI)1520-6793(199709)14:6<601::AID-MAR5>3.0.CO;2-B)
- Martin, D., Fowlkes, C., Tal, D., and Malik, J. (2001). A database of human segmented natural images and its application to evaluating segmentation algorithms and measuring ecological statistics. *Proceedings Eighth IEEE International Conference on Computer Vision. ICCV 2001*, 2, 416–423 vol.2. <https://doi.org/10.1109/ICCV.2001.937655>
- McQuarrie, E. F., and Mick, D. G. (1999). Visual Rhetoric in Advertising: Text-Interpretive, Experimental, and Reader-Response Analyses. *Journal of Consumer Research*, 26(1), 37–54. <https://doi.org/10.1086/209549>
- Metoyer-Duran, C. (1993). The readability of published, accepted, and rejected papers appearing in College and Research Libraries. *College and Research Libraries*, 54(6), 517–526.
- Mishra, A., and Mishra, H. (2010). Border Bias: The Belief That State Borders Can Protect Against Disasters. *Psychological Science*, 21(11), 1582–1586. <https://doi.org/10.1177/0956797610385950>
- Moeser, S. D. (1974). Memory for meaning and wording in concrete and abstract sentences. *Journal of Verbal Learning and Verbal Behavior*, 13(6), 682–697. [https://doi.org/10.1016/S0022-5371\(74\)80055-1](https://doi.org/10.1016/S0022-5371(74)80055-1)
- Netzer, O., Feldman, R., Goldenberg, J., and Fresko, M. (2012). Mine Your Own Business: Market-Structure Surveillance Through Text Mining. *Marketing Science*, 31(3), 521–543.
- Nielsen-Bohlman, L., Panzer, A. M., and Kindig, D. A. (2004). The extent and associations of limited health literacy. In *Health literacy: A prescription to end confusion*. National Academies Press (US). <https://www.ncbi.nlm.nih.gov/books/NBK216036/>
- Nisbett, R. E., Borgida, E., Crandall, R., and Reed, H. (1976). Popular induction: Information is not necessarily informative. In *Cognition and social behavior* (pp. xiii, 290–xiii, 290). Lawrence Erlbaum.
- Palmer, S. E. (1999). *Vision science: Photons to phenomenology*. MIT press. [https://books.google.com/books?hl=en&id=mNrxCwAAQBAJ&oi=fnd&pg=PR7&dq=Palmer,+S.+E.+\(1999\),+Vision+science:+Photons+to+phenomenology.+Cambridge,+MA:+The+MIT+Press.&ots=wGBoaPdofU&sig=sZ3cmpsX50-FQZJxZAKfvJcY9xU](https://books.google.com/books?hl=en&id=mNrxCwAAQBAJ&oi=fnd&pg=PR7&dq=Palmer,+S.+E.+(1999),+Vision+science:+Photons+to+phenomenology.+Cambridge,+MA:+The+MIT+Press.&ots=wGBoaPdofU&sig=sZ3cmpsX50-FQZJxZAKfvJcY9xU)
- Park, J., Lennon, S. J., and Stoel, L. (2005). On-line product presentation: Effects on mood, perceived risk, and purchase intention. *Psychology and Marketing*, 22(9), 695–719. <https://doi.org/10.1002/mar.20080>
- Pérez-Sobrino, P., Littlemore, J., and Houghton, D. (2019). The Role of Figurative Complexity in the Comprehension and Appreciation of Advertisements. *Applied Linguistics*, 40(6), 957–991. <https://doi.org/10.1093/applin/amy039>
- Petit, O., Velasco, C., and Spence, C. (2019). Digital Sensory Marketing: Integrating New Technologies Into Multisensory Online Experience. *Journal of Interactive Marketing*, 45, 42–61. <https://doi.org/10.1016/j.intmar.2018.07.004>

- Pieters, R., and Wedel, M. (2004). Attention Capture and Transfer in Advertising: Brand, Pictorial, and Text-Size Effects. *Journal of Marketing*, 68(2), 36–50. <https://doi.org/10.1509/jmkg.68.2.36.27794>
- Pieters, R., Wedel, M., and Batra, R. (2010). The Stopping Power of Advertising: Measures and Effects of Visual Complexity. *Journal of Marketing*, 74(5), 48–60. <https://doi.org/10.1509/jmkg.74.5.048>
- Ravina, E. (2019). Love and Loans The Effect of Beauty and Personal Characteristics in Credit Markets. 75.
- Roggeveen, A. L., Grewal, D., Townsend, C., and Krishnan, R. (2015). The Impact of Dynamic Presentation Format on Consumer Preferences for Hedonic Products and Services. *Journal of Marketing*, 79(6), 34–49. <https://doi.org/10.1509/jm.13.0521>
- Russakovsky, O., Deng, J., Su, H., Krause, J., Satheesh, S., Ma, S., Huang, Z., Karpathy, A., Khosla, A., Bernstein, M., Berg, A. C., and Fei-Fei, L. (2015). ImageNet Large Scale Visual Recognition Challenge. *arXiv:1409.0575 [Cs]*. <http://arxiv.org/abs/1409.0575>
- Savoy, J. (2018). Trump’s and Clinton’s Style and Rhetoric during the 2016 Presidential Election. *Journal of Quantitative Linguistics*, 25(2), 168–189. <https://doi.org/10.1080/09296174.2017.1349358>
- Schill, D. (2012). The Visual Image and the Political Image: A Review of Visual Communication Research in the Field of Political Communication. *Review of Communication*, 12(2), 118–142. <https://doi.org/10.1080/15358593.2011.653504>
- Schwanenflugel, P. J., Akin, C., and Luh, W.-M. (1992). Context availability and the recall of abstract and concrete words. *Memory and Cognition*, 20(1), 96–104. <https://doi.org/10.3758/BF03208259>
- Schwanenflugel, P. J., and Stowe, R. W. (1989). Context Availability and the Processing of Abstract and Concrete Words in Sentences. *Reading Research Quarterly*, 24(1), 114–126. <https://doi.org/10.2307/748013>
- Smith, J. E., and Smith, N. P. (1971). Readability: A measure of the performance of the communication function of financial reporting. *The Accounting Review*, 46(3), 552–561.
- Snyder, C. R. (1992). Product Scarcity by Need for Uniqueness Interaction: A Consumer Catch-22 Carousel? *Basic and Applied Social Psychology*, 13(1), 9–24. https://doi.org/10.1207/s15324834basps1301_3
- Snyder, C. R., and Fromkin, H. L. (2012). *Uniqueness: The human pursuit of difference*. Springer Science and Business Media.
- Stephen, A., and Lamberton, C. (2016). A thematic exploration of digital, social media, and mobile marketing research’s evolution from 2000 to 2015 and an agenda for future research. *Journal of Marketing*, 80(6). <https://ora.ox.ac.uk/objects/uuid:f6995406-9460-40b8-8743-857c8610139a>
- Stewart, D. W. (2002). Getting Published: Reflections of an Old Editor. *Journal of Marketing*, 66(4), 1–6. <https://doi.org/10.1509/jmkg.66.4.1.18520>
- Stillman, P., Lee, H., Deng, X., Unnava, H. R., and Fujita, K. (2020). Examining consumers’ sensory experiences with color: A consumer neuroscience approach. *Psychology and Marketing*, 37(7), 995–1007. <https://doi.org/10.1002/mar.21360>
- Tian, K. T., Bearden, W. O., and Hunter, G. L. (2001). Consumers’ Need for Uniqueness: Scale Development and Validation. *Journal of Consumer Research*, 28(1), 50–66. <https://doi.org/10.1086/321947>
- Trope, Y., and Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review*, 117(2), 440–463. <https://doi.org/10.1037/a0018963>

- Unnava, H. R., and Burnkrant, R. E. (1991). An Imagery-Processing View of the Role of Pictures in Print Advertisements. *Journal of Marketing Research*, 28(2), 226–231. <https://doi.org/10.2307/3172811>
- Valdez, P., and Mehrabian, A. (1994). Effects of color on emotions. *Journal of Experimental Psychology: General*, 123(4), 394.
- Walter, E., and Gioglio, J. (2020). *The Power of visual Storytelling :How to Use Visuals, Videos, and Social Media to Market Your Brand*. McGraw-Hill Education.
<http://dspace.vnbrims.org:13000/xmlui/handle/123456789/4153>
- Wang, J., Zhang, P., Chu, T., Cao, Y., Zhou, Y., Wu, T., Wang, B., He, C., and Lin, D. (2023, April 7). V3Det: Vast Vocabulary Visual Detection Dataset. *arXiv.Org*. <https://arxiv.org/abs/2304.03752v2>
- Warren, N. L., Farmer, M., Gu, T., and Warren, C. (2021). Marketing Ideas: How to Write Research Articles that Readers Understand and Cite. *Journal of Marketing*, 00222429211003560.
<https://doi.org/10.1177/00222429211003560>
- Watson, J., Ghosh, A. P., and Trusov, M. (2018). Swayed by the Numbers: The Consequences of Displaying Product Review Attributes. *Journal of Marketing*, 82(6), 109–131. <https://doi.org/10.1177/0022242918805468>
- Wedel, M., and Pieters, R. (2000). Eye fixations on advertisements and memory for brands: A model and findings. *Marketing Science*, 19. <https://doi.org/10.1287/mksc.19.4.297.11794>
- Wedel, M., and Pieters, R. (2007). Introduction to visual marketing. In *Visual Marketing* (pp. 13–20). Psychology Press.
- Wenkel, S., Alhazmi, K., Liiv, T., Alrshoud, S., and Simon, M. (2021). Confidence score: The forgotten dimension of object detection performance evaluation. *Sensors*, 21(13), 4350.
- Yang, S., Li, D., Tao, Z., and Li, X. (2018). Search engine advertising for organic food: The effectiveness of information concreteness on advertising performance. *Journal of Consumer Behaviour*, 17(1), 47–56.
<https://doi.org/10.1002/cb.1685>
- Yoon, K., Kim, D. Y., Yoon, Y.-C., and Jeon, M. (2019). Data association for multi-object tracking via deep neural networks. *Sensors*, 19(3), 559.
- Zhang, S., Lee, D., Singh, P. V., and Srinivasan, K. (2021). What Makes a Good Image? Airbnb Demand Analytics Leveraging Interpretable Image Features. *Management Science*, mnscl.2021.4175.
<https://doi.org/10.1287/mnscl.2021.4175>
- Zhu, X., Su, W., Lu, L., Li, B., Wang, X., and Dai, J. (2020). Deformable detr: Deformable transformers for end-to-end object detection. *arXiv Preprint arXiv:2010.04159*. <https://arxiv.org/abs/2010.04159>

**SESSION 22.2 PANEL: BEYOND THE ACADEMIC
CLIFF: REIMAGINING BUSINESS EDUCATION IN THE
AGE OF AI**

Panelists:

Bryan McLeod

Holly Syrdal

Amy Watson

SESSION 22.3 TRUST ON THE LINE: SIGNALS FROM DEI TO HEALTH

Moderators:

Jamie Chen

Full Paper

Does Institutional Support Always Foster Entrepreneurship?

The Mediating Role of Corruption

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Suman Saha, St. Cloud State University

Drawing on institutional theory, we argue that institutional support promotes entrepreneurship mainly by curbing corruption, which otherwise suppresses new business creation. Analyzing 165 countries using data from the Legatum Prosperity Index, the Corruption Perceptions Index, and the World Bank's New Business Density via Hayes's PROCESS Model 4 mediation tests reveals that the positive effect of institutional support on new business operates largely through reduced corruption. We find strong support for the "sand" view: corruption consistently dampens entrepreneurial activity, and we observe no evidence of a "grease" effect even in weaker institutional contexts. Clustering countries via residual-based k-means on corruption and new business creation (net of institutional pillars) reveals four archetypes of institutional alignment and misalignment. Our findings refine institutional theory by linking specific institutional corruption configurations to entrepreneurial outcomes and highlighting targeted policy levers to activate entrepreneurship in diverse national settings.

Introduction

Entrepreneurship is widely recognized as a cornerstone of economic development (Ordenana et al., 2024), innovation (Bradley et al., 2021), and job creation (Komninos et al., 2024), making it an essential field of study for economists, policymakers, and scholars alike. Understanding the multifaceted factors that influence entrepreneurial activity is crucial for fostering environments conducive to business creation and growth (Ortega-Anderez & Lai, 2017; Garmroudesfandiani et al., 2025). Entrepreneurship not only stimulates productivity and competitiveness but also plays a pivotal role in social transformation and resilience in both developed and developing economies (Acs & Szerb, 2010; Acs et al., 2014b). This makes it imperative to examine not just individual and firm-level determinants but also the broader institutional conditions that shape entrepreneurial outcomes across nations. Corruption refers to the abuse of entrusted authority or public power for private benefit, frequently manifesting at the interface of public and private sectors (Transparency International, 2023; Bardhan, 1997; Hamilton & Huther, 2018; Delios et al., 2024). In this regard, our study focuses on the interplay between institutional support and corruption, offering new empirical insights into their combined impact on new business creation worldwide.

Institutional support encompasses formal and informal structures—such as regulatory policies, cultural values, and social norms—that provide resources, stability, and incentives to foster entrepreneurial activity and new market entry (Hunt, 2015; Stephan et al., 2015; Scott, 1995; Dacin et al., 2002; Busenitz et al., 2000). Building on Aparicio et al. (2016), we posit that such institutional support increases new business creation both directly and indirectly by reducing corruption. In turn, lower corruption levels create a cleaner, more predictable business environment, which levels the playing field and lowers informal costs, thereby encouraging entrepreneurship. This mediating role of corruption aligns with prior evidence that institutional support affects entrepreneurial outcomes partly through the mechanism of corruption mediation (Acs et al., 2014a; Aparicio et al., 2016).

Rates of entrepreneurial activity vary widely across countries, often reflecting disparities in their institutional environments (Welter, 2011; Stephan et al., 2015). According to institutional theory (North, 1990), the rules, norms, and structures of a society—whether formal regulatory frameworks or informal cultural norms—profoundly shape entrepreneurial decisions (Baumol, 1990; Acs et al., 2014a). Supportive institutions can pave the way for entrepreneurs by ensuring stable governance, efficient markets, and access to public goods such as infrastructure and education. Conversely, institutional voids or weak governance can hinder business creation, forcing entrepreneurs to rely on informal mechanisms—including corruption—to navigate bureaucratic barriers. Entrepreneurial activity is therefore deeply embedded in broader societal and cultural contexts that can both constrain and enable new business creation

(Welter, 2011). Recognizing these contextual layers is essential for understanding not only how entrepreneurship emerges but also why its patterns differ so markedly across nations.

A contentious question in this debate is whether institutional support always fosters entrepreneurship or whether corruption can sometimes substitute for weak institutions, effectively “greasing the wheels” of business creation. Scholars have long debated the dual role of corruption in economic activity. One perspective argues that corruption can expedite entrepreneurial processes in institutionally weak contexts by bypassing cumbersome regulations and bureaucratic delays, thereby enabling faster market entry (e.g., through bribes to secure licenses) (Méon & Weill, 2010). From this “grease” perspective, corruption may temporarily offset institutional deficiencies. An opposing “sand the wheels” view contends that corruption erodes trust, increases transaction costs, and deters honest entrepreneurs, ultimately suppressing broad-based entrepreneurial activity (Boudreaux et al., 2018). Large-scale empirical work supports this latter perspective, showing that corruption generally harms entrepreneurship even in poor business climates (Dutta & Sobel, 2016). The core theoretical tension between these views remains unresolved, and it has substantial implications for policy and institutional design.

Recent scholarship has also examined how corruption interacts with institutional conditions to shape entrepreneurial activity. For example, Ghura et al. (2020) investigate post-communist economies and find that corruption moderates the relationship between formal institutions (e.g., procedural requirements, education and training, access to finance) and entrepreneurship. Their results show that while stronger formal institutions encourage entrepreneurship, this effect is weaker in high-corruption contexts. Our study builds on this line of inquiry but differs in important ways: we adopt a global scope rather than a regional focus, and we test a mediation model instead of moderation, allowing us to examine whether the influence of institutional support on entrepreneurship operates indirectly through corruption mediation. This distinction is critical for clarifying the mechanism—rather than the conditionality—of institutional effects on entrepreneurship.

In response to the future research direction outlined by Kuratko and Covin (2025), and in line with their appeal to move beyond “quick-and-easy” studies, this study offers empirically grounded insights designed to inform institutional reforms and strategies that enable entrepreneurial success.

Our study makes three contributions. First, we provide one of the most comprehensive cross-country analyses to date, integrating data from the Legatum Prosperity Index (LPI, 2017), Transparency International’s Corruption Perceptions Index (CPI, 2017), and the World Bank’s New Business Density (NBD, 2018) for a sample of 165 countries. Second, we employ a mixed-methods quantitative design: mediation analysis using Hayes’s PROCESS Model 4 to test our hypothesized mechanism, and residual-based k-means clustering to identify country archetypes based on institutional–corruption–entrepreneurship profiles. Third, our results show that by uncovering four distinct patterns from the results of our cluster analysis, we extend the institutional theory debate beyond the simple grease-versus-sand dichotomy, demonstrating that even in clean institutional contexts, structural and market dynamics can dampen entrepreneurial activity. Collectively, these contributions advance theoretical understanding and provide actionable insights for policymakers aiming to stimulate entrepreneurship through institutional strengthening and anti-corruption measures.

Theory and hypotheses

Historical and theoretical foundation

Entrepreneurship as an academic field has evolved through the integration of a wide range of theoretical perspectives over the past five decades, becoming increasingly recognized as a critical avenue for addressing the grand challenges of our time (Kuratko & Covin, 2025). Since the early writings of French economists, scholars have sought to define the scope, processes, and key actors of entrepreneurship. More than fifty years ago, Baumol (1968) criticized the narrow conceptualization of entrepreneurship within a traditional economic framework, calling for broader theoretical foundations. Responding to this need, researchers began applying established theories from other disciplines to entrepreneurship, one of the most influential being institutional theory. This perspective highlights how formal and informal rules, norms, and practices influence organizational behavior, offering valuable insights into how entrepreneurs interpret and respond to regulatory environments, cultural expectations, and industry conventions (DiMaggio & Powell, 1983, 1991; Scott, 1995, 2007). Although institutional theory had been well developed in the organizational sciences, its application to entrepreneurship emerged more recently, with Bruton, Ahlstrom, and Li (2010) offering a seminal review that underscored its importance. They highlighted that understanding entrepreneurship requires examining the institutionalized activities, beliefs, and attitudes that become taken-for-

granted or rule-like, as these can both enable and constrain entrepreneurial action across different contexts. Building on this theoretical foundation, it is essential to distinguish between the types of institutions that shape entrepreneurial behavior and the mechanisms through which they influence entrepreneurial outcomes.

Institutional Support and Entrepreneurship

Institutional theory asserts that entrepreneurs operate within a broader institutional architecture that profoundly shapes the feasibility and attractiveness of entrepreneurial action (North, 1990; Scott, 1995). Formal institutions—such as legal frameworks, regulatory systems, and the quality of governance—establish the “rules of the game,” reducing uncertainty and transaction costs when supportive, thereby enabling entrepreneurial entry and growth (Acs, Desai, & Hessels, 2008; Baumol, 1990). Informal institutions—shared cultural norms, trust, and networked relationships—further shape opportunity recognition, information flows, and cooperation (Putnam, 1993; Estrin, Korosteleva, & Mickiewicz, 2013). Together, these institutional layers can either facilitate or inhibit venture creation (Bruton, Ahlstrom, & Li, 2010).

Institutional support refers to the help, resources, and encouragement provided by a society’s systems, structures, and norms that enable or promote specific behaviors—such as entrepreneurship, innovation, or social change. Institutional support encompasses the formal and informal structures—such as regulatory policies (formal), cultural values (cognitive), and social norms (normative)—that collectively enable or constrain entrepreneurial behavior (e.g., Dacin et al., 2002; Scott, 1995; Busenitz et al., 2000). In other words, Institutional support means the ways in which governments, cultures, and social networks help people start and grow businesses or projects (Stephan et al., 2015).

The Legatum Prosperity Index (LPI) provides a multidimensional, validated framework for operationalizing the institutional environment at the national level. Simkins and Peterson (2016) conclude that “the LPI is both a reliable and valid source of secondary data suitable for academic and international research,” underscoring its credibility as a cross-country measurement tool. Matsuda dos Santos and Peterson (2025) extend this validation by applying advanced analytics to LPI data to identify archetypal country configurations, uncovering prosperity patterns that transcend conventional economic metrics. Their work demonstrates how the LPI’s interdependent pillars—such as economic quality, and social capital—capture complex socio-economic dynamics that influence entrepreneurial ecosystems (Malhotra et al., 1988; Simkins & Peterson, 2016).

In this study, we adopt the LPI to capture formal institutional support using five dimensions most salient to entrepreneurship: (1) Social Capital – trust and network cohesion that facilitate cooperation; (2) Investment Environment – the accessibility and security of capital markets; (3) Enterprise Conditions – the regulatory and procedural ease of starting and operating a business; (4) Infrastructure & Market Access – the availability of quality infrastructure and integration into domestic and global markets; and (5) Economic Quality – macroeconomic stability, competition, and market efficiency. These pillars reflect conditions identified in prior research as critical to fostering entrepreneurship (Aidis, Estrin, & Mickiewicz, 2008; Acs et al., 2008). Stable governance assures entrepreneurs of contract enforcement and policy consistency; robust infrastructure and market access reduce transaction costs and support scalability; favorable investment and enterprise conditions improve financing and operational ease; and strong social capital facilitates trust-based transactions. Each element, when functioning effectively, lowers barriers to entry and strengthens the likelihood of successful venture formation.

The Mediating Role of Corruption: Grease or Sand?

Corruption remains a persistent and pervasive global challenge, profoundly shaping economic and social outcomes. Transparency International (2023) reports that 152 out of 180 ranked countries have made no notable progress in reducing corruption since 2012, with some even experiencing deterioration. The economic and societal stakes are high: corruption undermines institutional trust, distorts market incentives, and alters entrepreneurial incentives (Crombach & Smits, 2024). The measurement of corruption has traditionally relied on composite indicators such as the Corruption Perceptions Index (CPI) and Control of Corruption Index (CCI), which aggregate assessments from experts, business executives, and diverse survey-based and institutional sources (Hamilton & Hammer, 2018). These indices enable robust cross-national comparisons of corruption’s causes and consequences and have been widely used in comparative entrepreneurship research (Mauro, 1998). However, such measures are often aggregated at the national level, potentially masking subnational variation that can be highly relevant for understanding entrepreneurial behavior (Crombach & Smits, 2024).

The dominant “sand in the wheels” perspective posits that corruption increases uncertainty, raises transaction costs, and deters entrepreneurial entry (North, 1991; Tanzi & Davoodi, 1998). Empirical research has repeatedly linked higher corruption to lower rates of new firm creation and weaker economic development (Anokhin & Schulze, 2009; Audretsch et al., 2022; Dutta & Sobel, 2016; Gründler & Potrafke, 2019; Mauro, 1995). This view holds that corruption erodes institutional support, impedes fair competition, and disincentivizes opportunity-driven entrepreneurship (Olawaju et al., 2025).

Conversely, the “grease the wheels” perspective suggests that in highly regulated and bureaucratically rigid environments, corruption may enable entrepreneurs to circumvent inefficiencies, expedite permits, or access resources otherwise locked in administrative delays (Huntington, 1968; Leff, 1964). Recent studies have found that under certain institutional constraints, corruption may partially offset the costs of red tape and encourage firm entry (Belitski et al., 2016; Dreher & Gassebner, 2013; Jauregui et al., 2021). This alternative framing has regained scholarly attention, particularly in contexts where bureaucratic inefficiency is severe (Dejardin & Laurent, 2024). While the majority of research has focused on corruption in high-corruption developing economies, there is growing evidence that corruption can also influence entrepreneurial outcomes in relatively low-corruption settings—through mechanisms such as public procurement, zoning, and subsidies (Graaf & Huberts, 2008; Graycar & Villa, 2011; Wittberg et al., 2024). The mixed evidence suggests that corruption’s effect on entrepreneurship is contextually contingent, shaped by institutional structures, regulatory environments, and market conditions (Cuervo-Cazurra, 2016; Delios et al., 2024).

In this study, we position corruption as a mediating mechanism through which institutional support influences new business creation. From the “sand” perspective, strong institutional support should reduce corruption, which in turn fosters entrepreneurial activity. From the “grease” perspective, in contexts where formal institutional processes remain rigid, corruption may act as an informal substitute, enabling entrepreneurs to navigate barriers to entry. This duality highlights corruption’s complex role in shaping the entrepreneurial landscape and justifies our examination of its mediating role across five key institutional support pillars: Social Capital, Investment Environment, Enterprise Conditions, Infrastructure & Market Access, and Economic Quality. Drawing on the dual perspectives on corruption—its potential to either obstruct (“sand in the wheels”) or, in certain contexts, facilitate (“grease the wheels”) entrepreneurial activity—we argue that institutional support primarily shapes entrepreneurial outcomes through its influence on corruption levels. Strong, transparent institutions reduce the reliance on informal, corrupt mechanisms, thereby fostering a more predictable and competitive environment for new ventures. Conversely, in environments with weak or inefficient institutions, corruption may emerge as a functional substitute, enabling entrepreneurs to bypass bureaucratic constraints. Building on this reasoning and past empirical evidence, we hypothesized that:

H1: Social Capital is negatively associated with corruption.

Countries with higher levels of interpersonal trust, dense community networks, and active civic engagement are more likely to foster institutional environments resistant to corrupt practices. Social capital—through mechanisms of shared norms, reciprocity, and collective action—enhances the capacity of citizens to monitor public officials, demand accountability, and enforce informal sanctions against rent-seeking behavior (Anderson & Jack, 2002; Dakhli & De Clercq, 2004). Strong community ties can also reduce information asymmetries between citizens and governing bodies, making it more difficult for corrupt acts to go undetected (Hitt et al., 2002). Empirical studies in cross-national contexts have shown that societies with robust social capital tend to exhibit lower corruption levels, as trust-based networks facilitate the development of transparent, rule-based institutions (Rupasingha et al., 2006; Li et al., 2015). This institutional integrity, in turn, supports an environment where entrepreneurial activity can thrive without the distortions of bribery, favoritism, or informal barriers to entry.

H2: The Investment Environment is negatively associated with corruption.

A well-functioning investment environment—characterized by secure property rights, impartial enforcement of contracts, accessible and fair financial systems, and transparent regulatory frameworks—reduces opportunities for rent-seeking and informal payments. Institutional arrangements that protect investors and ensure fair competition increase the costs and risks of engaging in corrupt transactions while lowering the incentives for such behavior (Estrin et al., 2013). Strong investment environments also facilitate market entry by lowering transaction costs and mitigating uncertainty, which reduces the bargaining power of public officials to extract bribes (North, 1990; Acemoglu & Johnson, 2005). Empirical evidence shows that economies with greater investor protections, clear legal frameworks, and efficient financial systems tend to exhibit lower levels of corruption, as transparent institutions constrain discretion

and close loopholes exploited by rent-seekers (Demirgüç-Kunt & Maksimovic, 1998). Consequently, such institutional conditions are conducive to higher rates of new business creation, as entrepreneurs face fewer non-market barriers to entry and operation.

H3: Enterprise Conditions are negatively associated with corruption.

Enterprise conditions—encompassing supportive business regulations, open and competitive markets, and transparent enforcement of competition laws—reduce the opportunities and incentives for corrupt practices by lowering barriers to entry and limiting discretionary power among officials. When regulatory frameworks are predictable, efficient, and fairly applied, entrepreneurs are less likely to rely on informal payments or political connections to secure market access (Aidis et al., 2008; Estrin & Mickiewicz, 2012). Competitive market structures also increase the likelihood that firms will engage in merit-based competition rather than rent-seeking, as anti-competitive privileges become harder to sustain in transparent environments (Manolova et al., 2008). Empirical evidence from cross-country studies shows that streamlined licensing procedures, fair enforcement of regulations, and clear rules for market participation are associated with lower perceived corruption and stronger entrepreneurial ecosystems (Levie & Autio, 2011; Chowdhury et al., 2019). These institutional conditions create a level playing field where entrepreneurs compete on innovation and efficiency rather than political favoritism, thereby reducing corruption's role as a gatekeeper to market participation.

H4: Infrastructure & Market Access is negatively associated with corruption.

High-quality infrastructure—such as reliable transportation networks, efficient logistics, robust digital connectivity, and dependable utilities—reduces the opportunities and incentives for corruption by lowering transaction costs, improving transparency, and enabling more direct access to markets. When infrastructure functions efficiently, businesses face fewer bureaucratic bottlenecks and have less need to rely on informal facilitation to move goods, access resources, or reach customers (Aterido et al., 2011; Dreher et al., 2009). Likewise, open and competitive market access, supported by transparent trade regulations and minimal barriers to entry, reduces the discretion of gatekeepers who might otherwise extract rents from entrepreneurs (Sobel et al., 2010). Empirical studies show that countries with better infrastructure and greater integration into competitive markets tend to have lower perceived corruption, as well as higher levels of entrepreneurial activity, because institutional efficiency substitutes for informal networks and bribery as a means of securing market participation (Bowen & De Clercq, 2008). Consequently, improvements in infrastructure and market openness not only enhance productivity but also foster cleaner institutional environments that support sustained business creation.

H5: Economic Quality is negatively associated with corruption.

A strong macroeconomic foundation—marked by stability, inclusive growth, and diversified economic activity—reduces the incentives and opportunities for corruption by enhancing institutional capacity and public sector accountability. Stable macroeconomic environments provide predictable policy conditions, limiting the discretion and uncertainty that corrupt actors often exploit (Aidis et al., 2012). Inclusive growth broadens the base of economic participation, increasing the number of stakeholders with an interest in transparent governance and reducing the concentration of economic rents (Estrin et al., 2013). Diversified economies are less susceptible to resource dependence, which has been linked to rent-seeking and patronage networks (Autio & Fu, 2015). Empirical evidence shows that countries with strong economic performance and resilient institutions are better equipped to enforce the rule of law, protect property rights, and maintain transparent regulatory systems, all of which constrain corruption (Chowdhury et al., 2019; Desai et al., 2013). In turn, such environments foster higher institutional trust and facilitate entrepreneurial entry, as entrepreneurs can operate without the distortionary costs of bribery or favoritism.

New Business

New business is a widely recognized indicator of entrepreneurial dynamism and economic vitality. The importance of new business creation extends beyond entrepreneurial metrics—it is closely linked to broader economic development. As Fritsch (2008) notes, “It seems rather plausible to expect that new business creation stimulates growth. As a consequence, many policymakers as well as scholars believe that stimulating new business creation is a promising way for achieving economic growth.” This belief has roots in the influential work of David Birch (1979, 1981, 1987), who argued that small and especially new businesses are the primary generators of jobs in the U.S. economy.

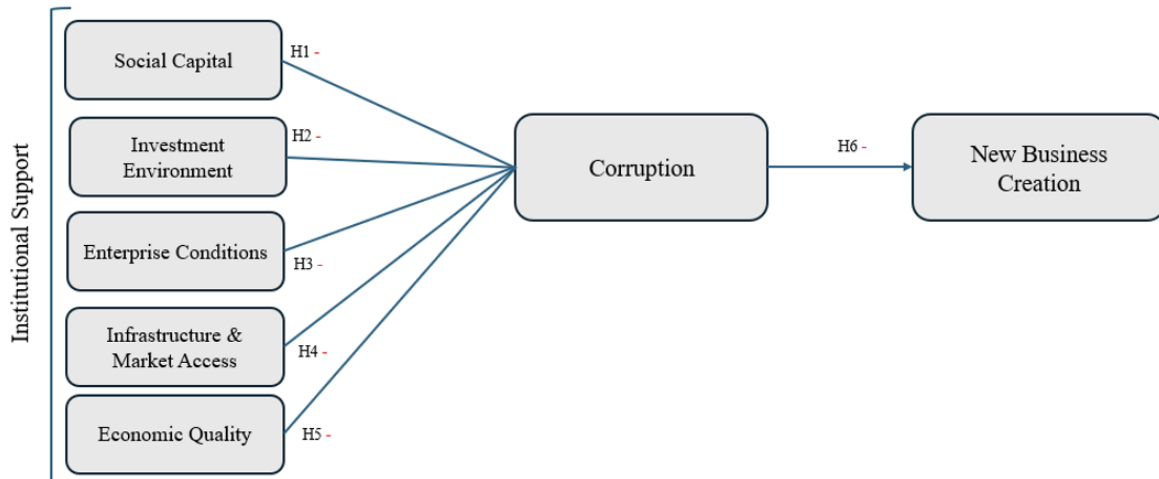
New business creation is often operationalized as NBD, which measures the ratio of newly registered limited liability corporations to the working-age population per year (Pramanik, Jana, & Ghosh, 2024). It provides a standardized benchmark for assessing a country's business environment and entrepreneurial output (Výrostková & Kádárová, 2023; Lerner & Schoar, 2010). By capturing the rate at which new businesses enter the market, NBD reflects the ease of transforming entrepreneurial intent into actual market participation. It also offers policymakers, investors, and scholars a diagnostic tool to identify systemic strengths and weaknesses in a nation's entrepreneurial ecosystem (Pramanik et al., 2024). While empirical findings on the strength and consistency of the NBD–growth relationship remain mixed (Carree & Thurik, 2003), the consensus remains that new business creation plays a vital role in fostering innovation, competition, and employment opportunities, making it a key focal point for entrepreneurship research. Prior research highlights that institutional conditions strongly influence NBD. Supportive formal institutions—such as transparent governance, efficient regulations, and strong property rights—can reduce barriers to entry, lower uncertainty, and encourage more individuals to start businesses (North, 1990; Bruton, Ahlstrom, & Li, 2010).

Conversely, adverse institutional conditions, particularly corruption, can distort the entrepreneurial process. However, empirical findings on the corruption–NBD relationship are mixed. For example, Dutta and Sobel (2016) find no overall improvement in entrepreneurship due to corruption, although its negative effect on NBD is weaker in countries with poor business climates. Similarly, Jauregui, Heriot, and Mitchell (2021) show that corruption's relationship with firm births can follow a non-linear “grease vs. sand” dynamic. Recent evidence also supports the idea that corruption can serve as a mediating mechanism between institutional support and entrepreneurial outcomes, influencing the degree to which formal support structures translate into tangible business formation (Dejardin & Laurent, 2024). This study builds on these insights by examining NBD across diverse economies using five key institutional support pillars from the Legatum Prosperity Index. In doing so, it responds to calls for deeper understanding of how macro-level institutional factors and corruption interact to shape entrepreneurial activity globally (Pramanik et al., 2024; Výrostková & Kádárová, 2023). The focus on NBD ensures alignment with established global entrepreneurship metrics, while the mediation perspective offers new theoretical and empirical contributions to the institutional theory of entrepreneurship. Finally, we propose:

H6: Corruption is negatively associated with new business creation.

Lower levels of perceived corruption are associated with higher rates of entrepreneurial activity, as clean governance reduces the costs, risks, and uncertainties of starting and operating a business. Corruption imposes an informal tax on entrepreneurs by requiring bribes or favors to obtain licenses, permits, and other regulatory approvals, raising barriers to entry and discouraging formal firm creation (Friedman et al., 2000; Dreher & Gassebner, 2013). In highly corrupt environments, entrepreneurs may face unequal access to resources and markets, with opportunities skewed toward politically connected firms (Aidis et al., 2012). Conversely, transparent regulatory frameworks and predictable enforcement lower transaction costs, improve access to finance, and enhance property rights, thereby encouraging new business formation (Anokhin & Schulze, 2009; Dau & Cuervo-Cazurra, 2014). Cross-country evidence consistently shows that countries with lower corruption scores tend to exhibit higher new business density, reflecting the central role of institutional quality in fostering inclusive and dynamic entrepreneurial ecosystems (Chowdhury et al., 2019; Bowen & De Clercq, 2008).

Figure 1: Conceptual Framework



Note. Figure 1 depicts the study's conceptual framework, outlining the proposed relationships between the five institutional support pillars, perceived corruption as the mediating mechanism, and new business creation.

Methods

Variables

The study examines the relationship between institutional support and new business creation mediated by corruption. Institutional support is operationalized using 5 pillars from LPI 2017 hypothesized in our model. These pillars collectively represent a multidimensional construct of national institutional support, encompassing both economic and social dimensions.

The dependent variable is New Business Density (NBD), measured as the number of newly registered limited liability firms per 1,000 working-age individuals (ages 15–64) in 2018. This measure reflects formal sector entrepreneurial activity, allowing for meaningful cross-country comparisons of business creation rates.

The mediating variable is the Corruption Perceptions Index (CPI), which captures perceived levels of public sector corruption in 2017. The CPI operates on a 0–100 scale, where higher values indicate lower corruption. The inclusion of CPI as a mediator is grounded in theory, suggesting that institutional support impacts entrepreneurship both directly and indirectly by shaping the governance environment in which firms operate.

Overview of the Sample

To construct the analytical dataset, three independent global datasets were integrated: the 2017 LPI, the 2017 CPI, and the 2018 NBD dataset from the World Bank. Data was collected across the past two decades and standardized to maximize country overlap across the three sources. This approach ensured broad geographic representation while maintaining data comparability across variables; hence, the 2017 period was selected.

To ensure cross-dataset compatibility, country names were cleaned for discrepancies in spelling, formatting, or alternative nomenclature across the three datasets. Inconsistent entries were systematically identified and corrected through manual review and standardization procedures. This standardization process enabled the inclusion of the maximum possible number of countries in the final analytical sample.

The integration process began with the 2017 LPI dataset, which contains 167 countries. The CPI dataset for 2017 encompasses 180 countries, while the NBD dataset for 2018 comprises 191 countries. Through cross-referencing, a total of 165 countries were identified as common to all three datasets, ensuring complete coverage for the mediation analysis.

A lagged structure was applied, with LPI and CPI measured in 2017, and NBD measured in 2018. This design choice reflects the temporal logic that changes in institutional conditions and governance perceptions preceded and potentially influence subsequent entrepreneurial activity. Using lagged data also mitigates concerns about simultaneity bias by ensuring that the independent and mediating variables are measured before the dependent variable.

Procedure

Data processing and analysis were conducted in four stages. First, the datasets were cleaned, standardized, and merged based on country names to ensure accurate alignment across sources. Countries with missing data in any of the three datasets were excluded from the analysis to maintain the sample integrity.

Second, all variables were standardized (using z-scores) to facilitate the comparability of coefficients and reduce issues of multicollinearity. The mediation analysis was performed using PROCESS Model 4 (Hayes, 2022) in SPSS, with bootstrapped confidence intervals (based on 5,000 resamples) for indirect effects (see Table 3). The analysis examined whether institutional support (LPI) influences NBD directly and indirectly through corruption (CPI). In other words, the mediation analysis provides estimates for: (a) the effect of institutional support on corruption (path *a*), (b) the effect of corruption on new business controlling for support (path *b*), (c) the direct effect of support on new business mediated by corruption (path *c'*, i.e., after mediation), and (d) the indirect effect via corruption (path $a \times b$). Significance of effects was determined by 95% confidence intervals not containing zero (for bootstrapped indirect effects) and p-values < 0.05 (for direct paths).

Table 3: Descriptive statistics of the sample

Variable	N	Mean	Std. Deviation
LPI 2017-Economic Quality	165	84.1	48.2
LPI 2017- Enterprise Conditions	165	84.4	48.3
LPI 2017-Infrastructure and Market Access	165	84.3	48.4
LPI 2017- Investment Environment	165	84.2	48.3
LPI 2017-Social Capital	165	84.3	48.4
NBD 2018	165	3.13	4.75
CPI 2017	165	42.4	19.3

Third, we sought cross-national patterns in the Institutional Support → Corruption → New Business Creation chain. To achieve this, we implement an IV-based, mediation-aware, residual k-means procedure that utilizes the institutional support IV both as an explicit level feature and as a partialled out variable when constructing residuals. This allows us to identify country archetypes of alignment/misalignment with the theorized

IV → mediator → DV pathway in 3 steps:

Step 1: IV level. We summarize the overall level of the five pillars using principal component analysis (PCA). (Variance explained and loadings are reported in the Appendix.)

Step 2: Mediation-aware residuals (conditioning on the IV). We compared each country's corruption and new-business rates to what the five pillars (and, for new-business, corruption too) would suggest—and kept the part that was left over.

Step 3: Clustering on IV basis and deviations. We standardize features and run k-means (Hartigan–Wong; Euclidean distance; nstart = 50; fixed seed) on the IV level, and the two residuals provide IV-conditioned deviations for the mediator and DV. The number of clusters is set to $k = 4$ based on the silhouette criterion and interpretability (average silhouette ≈ 0.39 in the retained solution). (see Table X) Our groups are clearly different: simple checks show they differ on both corruption and new-business rates, and the figures make this obvious in both the raw view and the adjusted view, with group centers and guidelines shown. In short, we use the IV as the basis for clustering while testing for a meaningful pattern across IV (level) → mediator (deviation) → DV (deviation).

Analyses were conducted in R (v4.5.1; R Core Team) in RStudio (2025.05.1; Posit) using base kmeans (Hartigan–Wong), prcomp for PCA, and the packages tidyverse, readxl, writextl, factoextra, and cluster.

Finally, interpretation focused on four outputs: (1) the direct effect of LPI on NBD, (2) the indirect effect through CPI, and (3) the strength and significance of the mediation pathway. (4) Cluster analysis. The results were

contextualized within the broader literature on institutional theory and entrepreneurship, allowing for theoretical and policy-relevant conclusions.

Dataset Descriptions

Legatum Prosperity Index (LPI)

The Legatum Prosperity Index™ is an authoritative framework for assessing national prosperity, capturing both economic and social well-being. Developed by the Legatum Institute in collaboration with over 100 global experts, the index comprises 12 pillars, 67 elements, and more than 300 indicators sourced from over 70 reputable data sources. It is recognized for its methodological rigor, applying a “distance to frontier” normalization method to ensure cross-country comparability. For this study, 5 pillars from the 2017 LPI were used as indicators of institutional support¹.

LPI is a multidimensional framework designed to assess the extent to which countries promote the flourishing of their residents, capturing both economic and social well-being (*Note: Of the 12 institutional pillars in the Legatum Prosperity Index, only five—Economic Quality, Enterprise Conditions, Investment Environment, Infrastructure and Market Access, and Social Capital—were theoretically aligned with our construct and research objectives; therefore, analyses were restricted to these five pillars*).

Unlike traditional macroeconomic indicators such as GDP per capita, the LPI adopts a holistic view of prosperity, encompassing factors that reflect quality of life, institutional strength, and opportunities for individuals to fulfil their potential (Legatum Institute, n.d.). The index measures prosperity across nearly all countries of the world, offering an authoritative benchmark for understanding how prosperity is created and sustained over time.

Data Sources and Methodology: The LPI is constructed from 12 pillars of prosperity, divided into 67 discrete policy-focused elements and grouped under three domains—Inclusive Societies, Open Economies, and Empowered People. These pillars are measured using over 300 indicators drawn from more than 70 publicly available data sources. The methodology was developed in collaboration with over 100 subject-matter experts worldwide, ensuring conceptual validity and statistical robustness. To harmonize the diverse units of measurement (e.g., percentages, ordinal scales, counts), a distance to frontier approach is applied, benchmarking each country’s performance against the best and worst observed cases. Indicators and elements are assigned weights (ranging from 0.5 to 2 at the indicator level) based on academic literature, expert opinion, and statistical significance to overall prosperity, ensuring that the index reflects both theoretical relevance and empirical impact.

Reliability, Scope, and Policy Relevance: The LPI’s comprehensive design enables it to capture the complex interplay between governance, economic conditions, and human development. Each pillar offers actionable insights—for example, Enterprise Conditions assesses the regulatory environment for business creation and growth, and Personal Freedom evaluates legal rights and social tolerance. Population-weighted averages are used for regional and global scores to better reflect the lived experiences of individuals rather than treating all countries equally by count. The index’s methodological rigor and breadth make it a reliable, policy-relevant tool for tracking progress, identifying weaknesses, and formulating strategies that enhance long-term prosperity. Its integration of social, economic, and environmental indicators positions it as a unique global benchmark for holistic development.

New Business Density (NBD)

NBD is defined as the number of newly registered firms with limited liability per 1,000 working-age individuals (ages 15–64) in a given calendar year. This measure is sourced from the Entrepreneurship Database maintained by the World Bank, which systematically tracks entrepreneurial activity across countries to ensure global comparability (World Bank, n.d.). It focuses exclusively on formal sector entities, specifically private companies with limited liability, given their legal status as separate entities and their widespread presence in varying legal and economic systems. This narrow but precise definition strengthens cross-country comparability, even though it excludes informal sector enterprises, which are significant in many developing economies.

Data Collection and Sources: The Entrepreneurship Database employs a standardized methodology for data collection, primarily relying on national business registries. When registry data are unavailable, alternative sources such as statistical agencies, tax authorities, chambers of commerce, and publicly available datasets are utilized. The process combines telephone interviews and email correspondence with registry officials to ensure accuracy and currency of the data. By maintaining consistency in units of measurement, information sources, and definitional scope, the dataset enables researchers to draw meaningful cross-country comparisons of entrepreneurial activity.

Reliability and Scope: To maintain the integrity of trend analysis, data from offshore financial centers—often containing shell companies with little to no substantive economic activity—are excluded. This exclusion prevents distortions that could arise from jurisdictions with high volumes of tax-registration-only entities. Furthermore, while the omission of informal sector firms limits the dataset’s coverage in certain economies, this decision is based on practical constraints in quantifying such firms rather than on their economic irrelevance. Consequently, the NBD metric offers a robust, reliable, and policy-relevant measure of formal entrepreneurship, facilitating research on the links between new firm creation, regulatory environments, and economic growth.

Corruption Perceptions Index (CPI)

The CPI, published annually by Transparency International, measures the perceived level of public sector corruption on a scale of 0 (highly corrupt) to 100 (very clean). The index aggregates expert assessments and opinion surveys, providing a globally recognized benchmark for governance integrity. The 2017 CPI values were used in this study as a mediator, linking institutional support to entrepreneurial activity.

Measurement: CPI assesses perceived levels of public sector corruption across countries using a scale from 0 (highly corrupt) to 100 (very clean). The index is based on expert assessments and opinion surveys from diverse global sources, offering a standardized and comparable measure of corruption perceptions (Transparency International, n.d.). In the 2017 CPI, more than two-thirds of the 180 assessed countries scored below 50, indicating that over six billion people live in countries where corruption is considered widespread. Although no country achieves a perfect score, even high-scoring nations face challenges such as opaque decision-making, illicit financial flows, and weak enforcement of anti-corruption laws.

Data Sources and Methodology: The CPI is compiled by Transparency International through the aggregation of multiple data sources, including assessments by reputable institutions and surveys of experts and businesspeople. Its methodology ensures cross-country comparability by standardizing the scale and criteria, while drawing on a broad evidence base to capture perceptions of corruption in the public sector. Transparency International operates in more than 100 countries through national chapters and an international secretariat in Berlin, employing consistent advocacy, research, and monitoring practices. This combination of methodological rigor and institutional reach strengthens the index’s reliability as a proxy for corruption.

Reliability, Scope, and Relevance: The CPI index’s results are strongly associated with governance outcomes such as transparency, accountability, and freedom of expression. Notably, higher CPI scores tend to correlate with stronger protections for journalists and activists, while lower scores are linked to greater restrictions on civic space and media freedom. These linkages underscore the CPI’s value not only as a corruption metric but also as a broader indicator of governance. By highlighting both the prevalence of corruption and its relationship to democratic freedoms, the CPI provides policymakers, researchers, and civil society with a vital tool in the global fight against corruption.

Results

The empirical findings of this study are presented in two complementary parts. First, we report the results of a series of mediation analyses examining whether the relationship between five key institutional support pillars—Economic Quality, Social Capital, Investment Environment, Enterprise Conditions, and Infrastructure & Market Access—and NBD is mediated by corruption (CPI). This analysis provides insight into the causal pathways through which institutional conditions influence entrepreneurial activity. Second, we present the results of a cluster analysis, which groups countries into distinct profiles based on their institutional support, corruption levels, and entrepreneurial outcomes. This segmentation offers a comparative lens for understanding how combinations of institutional attributes and governance contexts shape patterns of new business creation across the global sample (see Table 4).

Table 4: Correlations among variables

Variables	Social Capital	Investment Environment	Enterprise Conditions	Infrastructure and Market Access	Economic Quality	NBD	CPI
Social Capital	1	.548**	.487**	.529**	.572**	-.352**	-.568**
Investment Environment	.548**	1	.912**	.935**	.878**	-.575**	-.864**

Enterprise Conditions	.487**	.912**	1	.834**	.792**	-.557**	-.843**
Infrastructure and Market Access	.529**	.935**	.834**	1	.891**	-.546**	-.814**
Economic Quality	.572**	.878**	.792**	.891**	1	-.563**	-.795**
NBD	-.352**	-.575**	-.557**	-.546**	-.563**	1	.616**
CPI	-.568**	-.864**	-.843**	-.814**	-.795**	.616**	1

** . Correlation is significant at the 0.01 level (2-tailed).

Mediation Analyses

We examined the mediating role of the Corruption Perception Index (M) in the relationship between five institutional support pillars from the Legatum Prosperity Index (X) and New Business Density (Y). All analyses were conducted using PROCESS Model 4 (Hayes, 2022) with 5,000 bootstrap samples and 95% percentile bootstrap confidence intervals.

Economic Quality: It exhibited a strong, negative association with corruption ($B = -0.7950$, $p < .001$, $R^2 = 0.6320$), indicating that higher economic quality is linked to lower perceived corruption. Corruption, in turn, significantly predicted higher new business density ($B = 0.4570$, $p < .001$). The direct effect of Economic Quality on entrepreneurship remained negative and significant ($B = -0.1995$, $p = 0.0496$) when mediated by corruption, while the indirect effect via corruption was significant once the mediator was included ($B = -0.3633$, 95% CI $[-0.5506, -0.1812]$) (Chowdhury, 2019). This indicates partial mediation, where Economic Quality fosters entrepreneurship primarily through lowering corruption, but also exerts a small negative direct influence, potentially reflecting structural conditions in more developed economies.

Social Capital: It was moderately and negatively associated with corruption ($B = -0.5685$, $p < .001$, $R^2 = 0.3232$). Higher social capital was related to cleaner governance, and lower corruption was linked to greater new business density ($B = 0.6141$, $p < .001$). The direct effect of Social Capital on entrepreneurship was negligible and non-significant once the mediator was included ($B = -0.0025$, $p = 0.9730$). The indirect effect was significant ($B = -0.3491$, 95% CI $[-0.4974, -0.2215]$), indicating full mediation — the impact of social capital on entrepreneurship operates entirely through its influence on governance quality.

Investment Environment: It had the strongest relationship with corruption among all pillars ($B = -0.8641$, $p < .001$, $R^2 = 0.7466$). Lower corruption was again associated with higher new business density ($B = 0.4697$, $p < .001$). The direct effect was non-significant ($B = -0.1689$, $p = 0.1693$), while the indirect effect was significant once the mediator was included ($B = -0.4058$, 95% CI $[-0.6385, -0.1748]$). This indicates full mediation, with the Investment Environment promoting entrepreneurship solely through reducing corruption levels.

Enterprise Conditions: It was strongly and negatively associated with corruption ($B = -0.8434$, $p < .001$, $R^2 = 0.7113$). Cleaner governance predicted greater entrepreneurial activity ($B = 0.5036$, $p < .001$). The direct effect on new business density was non-significant ($B = -0.1328$, $p = 0.2490$), and the indirect effect was significant once the mediator was included ($B = -0.4247$, 95% CI $[-0.6315, -0.2343]$), indicating full mediation.

Infrastructure and Market Access: A strong negative relationship was observed with corruption ($B = -0.8144$, $p < .001$, $R^2 = 0.6632$). Corruption significantly predicted new business density ($B = 0.5063$, $p < .001$). The direct effect was non-significant ($B = -0.1342$, $p = 0.2081$), while the indirect effect was significant once the mediator was included ($B = -0.4123$, 95% CI $[-0.6117, -0.2352]$). This provides evidence of full mediation.

Across all five institutional pillars, the paths ($X \rightarrow M$) were negative and significant, indicating that stronger institutional support is consistently associated with lower corruption. The b paths ($M \rightarrow Y$) were positive and significant across all models, confirming that cleaner governance fosters entrepreneurial activity. Four pillars (Social Capital, Investment Environment, Enterprise Conditions, and Infrastructure and Market Access) demonstrated full mediation, while Economic Quality exhibited partial mediation.

Cluster Analyses Outcome

The cluster analysis of country-level indicators revealed **four distinct groups of countries** with markedly different profiles in terms of entrepreneurial activity and institutional conditions (see Table 6).

Cluster 1: High Entrepreneurship, Improving Institutional Environment

Cluster 1 (N = 11 countries) is distinguished by exceptionally high entrepreneurial activity alongside reasonably strong (though not top-tier) institutional outcomes. This cluster exhibits the highest average New Business Density (mean NBD ≈ 17.21 new firms per 1,000 adults) by a wide margin, indicating a very active rate of new firm creation. For perspective, this NBD level is several times higher than the global average and far exceeds that of other clusters. Countries in Cluster 1 include Hong Kong, the United Kingdom, New Zealand, Estonia, Luxembourg, and Georgia, among others. These economies, despite their diversity, share a common profile of being entrepreneurial hotspots with improving governance conditions. The average CPI rank in Cluster 1 is about 33, indicating relatively low corruption (on average these countries fall in roughly the top quintile globally for clean governance). Notably, several Cluster 1 countries are known for substantial business environment reforms (e.g., Georgia and Cabo Verde) or for being dynamic small economies (e.g., Hong Kong, Malta) that encourage business formation.

In terms of recent trends, Cluster 1 countries have seen significant positive changes in entrepreneurship rates – the mean change in NBD (ΔNBD) is +10.26 (indicative of a substantial uptick in new business registrations over the period examined). This suggests that many of these countries implemented policies or experienced economic conditions that greatly accelerated new firm formation. Simultaneously, the average change in corruption ($\Delta\text{CPI rank}$ ≈ -4.17) suggests a moderate improvement in institutional transparency (a negative change in rank implies moving closer to #1, i.e. becoming less corrupt). The prosperity indicators further reflect this cluster's profile: these nations score in the upper tier globally on Economic Quality and Investment Environment (mean ranks around Thirty to Forty across those pillars), although their Social Capital tends to be somewhat lower (mean Social Capital rank ~ 52 , slightly lagging behind the most advanced nations in Cluster 4). Overall, Cluster 1 can be summarized as economies with thriving entrepreneurial activity and solid, improving institutions – often small or mid-sized countries that have become regional leaders in new business creation.

Cluster 2: Low Entrepreneurship, Weak Institutional Performance

Cluster 2 (N = 56 countries) represents the opposite end of the spectrum: these countries exhibit very low levels of formal entrepreneurship alongside generally poor institutional and prosperity outcomes. This is by far the largest cluster and it encompasses many developing and lower-income economies, particularly in regions like sub-Saharan Africa and parts of Asia. Examples include Lesotho, Zimbabwe, Nigeria, Cambodia, and Belarus, among others. The average NBD in Cluster 2 is only about 0.41, the lowest of all clusters. Such a low new business density indicates that formal new firm formation is extremely limited in these economies (often less than one new company per 2,000 working-age adults annually), which may reflect barriers to entrepreneurship such as burdensome regulations, lack of access to capital, or prevalence of informal sector activity.

Institutionally, Cluster 2 countries tend to struggle with governance and prosperity factors. The mean CPI rank is ~ 74 , which signifies relatively high perceived corruption (on average these countries rank in the bottom half globally in clean governance). Indeed, many in this group are characterized by weak rule of law and accountability issues. Correspondingly, they rank poorly across the Legatum Prosperity pillars: for instance, the average Social Capital rank is about 117, and similarly high (i.e., poor) ranks are observed for Economic Quality, Enterprise Conditions, and Infrastructure (all roughly in the 130s on average). These figures place Cluster 2 countries near the bottom quartile of global prosperity and institutional rankings, highlighting deficits in economic fundamentals and social infrastructure. Moreover, recent changes have been minimal or negative – the cluster's mean ΔNBD is essentially zero (0.06), indicating no significant improvement in new business creation rates over the study period. The average change in corruption rank ($\Delta\text{CPI rank} \approx -3.71$) is a slight improvement on paper (a small decrease in rank value), but given the overall poor baseline, corruption remains a serious concern in this group. In summary, Cluster 2 can be viewed as the “weak environment” cluster: countries here face systemic challenges to entrepreneurship, including pervasive institutional weaknesses and underdeveloped economic systems, resulting in persistently low entrepreneurial activity.

Cluster 3: Moderate Entrepreneurship in Emerging Economies

Cluster 3 (N = 71 countries) is characterized by moderate levels of entrepreneurship and mid-range institutional performance, typical of many emerging or transition economies. This cluster is the largest by country count and includes diverse nations such as China, South Africa, India, Brazil, Bulgaria, and Mauritius. The average

New Business Density is about 2.59, indicating a moderate rate of new firm entry (higher than Cluster 2's but still well below the entrepreneurial hotspots of Cluster 1). This suggests that, in these countries, formal entrepreneurship is taking hold to some degree, but not uniformly – often reflecting “efficiency-driven” economies that are growing but not yet at the frontier of innovation-driven entrepreneurship. For instance, countries like China and Brazil have seen growing startup scenes but also face structural hurdles that keep overall per-capita startup rates moderate.

The institutional and prosperity metrics for Cluster 3 are squarely middle-of-the-road. The mean CPI rank is ~62, which indicates moderate levels of corruption (these countries tend to fall around the global median in corruption rankings). Likewise, their Legatum Prosperity pillar ranks cluster around the 70s to low 80s on average. For example, Social Capital in Cluster 3 has an average rank of ~80.7, and similar mid-tier rankings are seen for Economic Quality, Enterprise Conditions, and Infrastructure (mid-70s on average). These figures suggest that Cluster 3 countries have made significant progress in building institutional foundations – many have reasonably stable economies and improving governance – yet they still fall short of the very high institutional benchmarks observed in advanced economies. It's notable that recent trends in Cluster 3 are mixed: the average change in NBD is slightly negative ($\Delta\text{NBD} \approx -0.46$), implying that on balance there was no strong uptick in new firm formation in recent years (some countries improved while others saw declines). The average ΔCPI rank is +6.25, which unexpectedly indicates a worsening in perceived corruption (a higher rank number) for many of these countries. In other words, some emerging economies experienced setbacks or slower improvements in governance relative to their peers, which might have tempered their entrepreneurial momentum. Overall, Cluster 3 countries can be described as “middle performers” – they are typically middle-income nations with developing entrepreneurial ecosystems and moderately functional institutions. They contrast with Cluster 1 and 4 by having neither exceptionally high entrepreneurship nor exceptionally clean institutional environments, but they often exhibit incremental progress on both fronts.

Cluster 4: Strong Institutions with Moderate Entrepreneurial Activity

Cluster 4 (N = 27 countries) comprises primarily highly developed economies distinguished by excellent institutional support and prosperity outcomes, coupled with only moderate rates of new business creation. In many ways this cluster represents the world's most advanced national environments for doing business, though interestingly not the highest in terms of startup density. Notable members of Cluster 4 include Denmark, Singapore, Norway, Canada, Switzerland, Germany, Japan, the United States, and Chile, among others. These countries are typically high-income, OECD or otherwise very competitive economies. The average CPI rank in Cluster 4 is ~28, placing this group firmly in the top tier globally for low corruption and good governance (indeed, several cluster members—Denmark, Singapore, Norway—consistently rank among the least corrupt nations in the world). Similarly, Cluster 4 countries excel across the Legatum Prosperity pillars. For example, the average ranks for Economic Quality, Enterprise Conditions, Investment Environment, and Infrastructure are all around the mid-20s, indicating that these countries are world leaders in economic institutions, market conditions, and overall infrastructure for prosperity. Their Social Capital is slightly lower on average (mean SC rank ≈ 38.7), but still considerably better than the global median, reflecting generally high levels of social trust and civic cohesion in this cluster.

Where Cluster 4 differs from Cluster 1 is in entrepreneurial dynamism. The mean New Business Density for Cluster 4 is about 4.42, which is only a moderate level of new firm creation relative to the global range. While this NBD is higher than in Cluster 2 and Cluster 3, it is well below the exuberant entrepreneurial rate seen in Cluster 1. In practical terms, many of these advanced economies exhibit steady but not explosive startup activity. This can be partly understood in context: in innovation-driven, mature economies, business formation might be tempered by factors such as market saturation, an established base of large incumbent firms, higher opportunity costs of entrepreneurship, or demographic trends. Indeed, prior research has noted that total entrepreneurial activity tends to be lower in innovation-driven economies than in factor-driven economies, as entrepreneurship in wealthy nations is often more opportunity-driven and focused on quality over quantity. Our cluster results echo that pattern – world-leading institutional support does not necessarily coincide with the highest volume of new startups. It is worth noting that Cluster 4 countries actually saw a decline in new business density on average in recent years (mean $\Delta\text{NBD} \approx -3.10$), suggesting that the rate of new firm entry has stagnated or decreased slightly in this group. This could be due to economic cycles or a plateauing of entrepreneurship rates after a previous peak. Nonetheless, their institutional foundations remained extremely strong (the slight average improvement in corruption scores, $\Delta\text{CPI} \approx -7.04$, indicates they have largely maintained or further improved their clean governance standards).

Importantly, Cluster 4 is the group in which our paper's focal context resides. These findings underscore a central theme of our research: even in environments with exceptional governance, robust economic institutions, and

high overall prosperity, the level of entrepreneurial activity can be relatively modest. This cluster provides a nuanced counterpoint to Cluster 1 – whereas Cluster 1 illustrates high entrepreneurship possibly compensating for only moderately good institutions, Cluster 4 represents the scenario of stellar institutions but comparatively lower new business dynamism. The contrast between these clusters offers valuable insight. For instance, entrepreneurs in Cluster 4 countries operate in settings with minimal corruption and world-class infrastructure, yet policymakers in these nations often grapple with how to stimulate higher rates of new venture creation (which may be crucial for innovation and growth) despite an ostensibly optimal business environment. Our study’s contribution is situated in explaining such paradoxical situations, and Cluster 4 serves as a crucial reference point for understanding the interplay between institutional excellence and entrepreneurial outcomes.

Table 6: Summary Statistics for Country Clusters by Corruption, New Business Density, and Institutional Pillar Rankings

Cluster	n	Mean CPI	Mean NBD	Mean CPI	Mean NBD	Mean Economic Quality	Mean Enterprise Conditions	Mean Investment Environment	Mean Infrastructure and Market Access	Mean Social Capital
1	11	33.00	17.21	-4.17	10.26	38.00	31.27	35.45	37.91	51.73
2	5	74.29	0.41	-3.71	0.06	130.36	132.84	134.89	132.07	117.13
3	6	61.58	2.59	6.25	-0.46	76.08	76.68	74.32	75.21	80.70
4	7	28.63	4.42	-7.04	-3.10	27.85	25.63	24.81	27.89	38.74

In summary, the apparent differences across clusters (in both level and trajectory of entrepreneurship and institutional metrics) reinforce the idea that the entrepreneurial development of a country is deeply intertwined with its institutional context. Our subsequent analysis (see Discussion) will leverage this cluster structure to delve deeper into how and why Cluster 4-type economies – the context of our research – can achieve strong entrepreneurial outcomes in qualitative terms (innovation, growth of firms) even when the quantity of new startups is relatively contained. The cluster results thus set the stage for a more nuanced understanding of the relationship between institutions and entrepreneurship in different country environments, aligning with and extending prior entrepreneurship theory in a cross-country perspective.

Discussion

This study set out to examine how institutional support influences entrepreneurial activity to explore how different country contexts combine institutional characteristics, corruption, and entrepreneurship outcomes. The mediation analyses and cluster segmentation together provide a rich, multi-level understanding of these dynamics.

Institutional Support, Corruption, and Entrepreneurship

The mediation results offer strong evidence for the institutional theory perspective: improvements in institutional pillars—Economic Quality, Social Capital, Investment Environment, Enterprise Conditions, and Infrastructure & Market Access—are consistently associated with lower perceived corruption, and cleaner governance is in turn linked to higher new business density. For four of the five pillars, the direct link to entrepreneurship was fully mediated by corruption, underscoring that these institutional domains affect entrepreneurial activity primarily by reducing governance-related frictions.

Economic Quality emerged as the only pillar with partial mediation, reflecting a strong indirect pathway but also a small negative direct effect on new business density. This pattern suggests a nuanced relationship in high-income, mature economies: while robust economic fundamentals enhance governance and thus support entrepreneurship, structural market maturity, saturation, or high opportunity costs may dampen start-up rates. This aligns with prior research highlighting that entrepreneurial volume often declines in advanced economies even as entrepreneurial quality and innovation intensity remain high.

These findings resonate with the “sand in the wheels” view of corruption, where corruption consistently hinders entrepreneurship by adding costs and uncertainty. However, the Economic Quality case opens space for a more nuanced understanding of the “grease vs. sand” debate, indicating that even in contexts of strong institutions, factors unrelated to corruption may constrain start-up formation.

Country Profiles: Clusters of Institutions and Entrepreneurship

The cluster analysis complements the mediation results by revealing how institutional and governance conditions co-occur in practice. Four distinct profiles emerged:

- **Cluster 1:** Entrepreneurial hotspots with improving institutional support, often smaller economies or reform-driven states, demonstrating that high entrepreneurship can occur outside the world’s most institutionally advanced contexts.
- **Cluster 2:** Low entrepreneurship and weak institutions, where systemic barriers, high corruption, and underdeveloped prosperity indicators constrain start-up formation.
- **Cluster 3:** Moderate entrepreneurship in emerging economies, with mid-tier institutions and mixed governance trends, illustrating transitional contexts with uneven progress.
- **Cluster 4:** Strong institutions but moderate entrepreneurship, representing mature, high-income economies where exceptional governance does not translate into the highest start-up density.

The juxtaposition of Clusters 1 and 4 is particularly instructive: Cluster 1 shows how entrepreneurial vibrancy can thrive in improving but not perfect institutional environments, while Cluster 4 demonstrates that institutional excellence does not guarantee high new business creation. These patterns underline that the institutional–entrepreneurship relationship is contingent on broader economic and market structures, and that the quantity of entrepreneurship must be interpreted alongside its quality.

Theoretical Contributions and Policy Implications

This research advances institutional theory in entrepreneurship by integrating a micro-level mechanism test (mediation via corruption) with a macro-level pattern analysis (clusters). It shows that institutional pillars influence entrepreneurship in consistent ways through governance, but the overall entrepreneurial profile of a country depends on the configuration of institutional conditions, governance quality, and economic maturity.

The combination of full mediation for most pillars and the nuanced partial mediation for Economic Quality suggests that policy interventions should target corruption reduction as a primary lever, but also account for structural market dynamics that may moderate the institutional–entrepreneurship link.

For policymakers, the results highlight two priorities. First, reducing corruption is a universally beneficial strategy for boosting formal entrepreneurship across institutional contexts. Second, in high-income, institutionally strong economies (Cluster 4), stimulating entrepreneurial volume may require targeted measures beyond institutional reforms, such as fostering innovation-driven entrepreneurship, lowering barriers to entry in saturated markets, and encouraging youth and immigrant entrepreneurship.

For emerging economies in Clusters 1 and 3, the challenge is to consolidate institutional reforms and sustain governance improvements while scaling access to capital, skills, and networks to translate institutional progress into higher entrepreneurial volume and quality.

Limitations and Future Research

While the cross-country design provides broad generalizability, it cannot establish causal direction definitively. Talking about the different contexts in which entrepreneurship happens helps us better understand what entrepreneurship is, how rich it is, and how it changes over time (Zahra, 2007). Longitudinal or quasi-experimental designs could better identify the temporal sequence of institutional change, corruption reduction, and entrepreneurial growth. Future work might also integrate measures of entrepreneurial quality and innovation performance to assess whether institutional pathways differ for high-growth vs. necessity-based entrepreneurship. Additionally, qualitative comparative analysis (QCA) could further unpack the configurations of institutional and governance factors that produce high entrepreneurship in different economic stages.

In conclusion, institutional support and corruption are not just background conditions but active determinants of entrepreneurial outcomes. Strong institutions and low corruption are, figuratively, the oil that allows the entrepreneurial engine to run smoothly – they reduce friction, prevent overheating, and ensure power is transmitted

efficiently into forward motion. Corruption, in contrast, is a grinding abrasive that wears down the cogs of innovation and enterprise. The creation of new businesses, and the economic growth and opportunity they generate at a macro level, depend profoundly on getting these institutional ingredients right.

References

- Acemoglu, D., & Johnson, S. (2005). Unbundling institutions. *Journal of political Economy*, 113(5), 949-995.
- Achim, M. V. (2017). Corruption, income and business development. *Journal for International Business and Entrepreneurship Development*, 10(1), 85-100.
- Ahsan, M., Adomako, S., & Mole, K. F. (2021). Perceived institutional support and small venture performance: The mediating role of entrepreneurial persistence. *International Small Business Journal*, 39(1), 18-39. <https://doi.org/10.1177/0266242620943194>
- Aidis, R., Estrin, S., & Mickiewicz, T. (2008). Institutions and entrepreneurship development in Russia: A comparative perspective. *Journal of Business Venturing*, 23(6), 656-672. <https://doi.org/10.1016/j.jbusvent.2008.01.005>
- Aidis, R., Estrin, S., & Mickiewicz, T. M. (2012). Size matters: Entrepreneurial entry and government. *Small Business Economics*, 39(1), 119-139. <https://doi.org/10.1007/s11187-010-9299-y>
- Alfaro, E. (2022). Understanding the Corruption Perceptions Index. In V. Charles & A. Emrouznejad (Eds.), *Modern Indices for International Economic Diplomacy* (pp. 233-270). Springer International Publishing. https://doi.org/10.1007/978-3-030-84535-3_9
- Alvarez, C., Lopez, T., & Urbano, D. (2025). Do institutional dimensions matter at different stages of the entrepreneurial process? A multi-country study. *Small Business Economics*, 64(2), 353-381. <https://doi.org/10.1007/s11187-024-00920-4>
- Anderson, A. R., & Jack, S. L. (2002). The articulation of social capital in entrepreneurial networks: A glue or a lubricant? *Entrepreneurship & Regional Development*, 14(3), 193-210. <https://doi.org/10.1080/08985620110112079>
- Anokhin, S., & Schulze, W. S. (2009). Entrepreneurship, innovation, and corruption. *Journal of Business Venturing*, 24(5), 465-476. <https://doi.org/10.1016/j.jbusvent.2008.06.001>
- Aparicio, S., Urbano, D., & Audretsch, D. (2016). Institutional factors, opportunity entrepreneurship and economic growth: Panel data evidence. *Technological Forecasting and Social Change*, 102, 45-61. <https://doi.org/10.1016/j.techfore.2015.04.006>
- Autio, E., & Fu, K. (2015). Economic and political institutions and entry into formal and informal entrepreneurship. *Asia Pacific Journal of Management*, 32(1), 67-94. <https://doi.org/10.1007/s10490-014-9381-0>
- Avnimelech, G., Zelekha, Y., & Sharabi, E. (2014). The effect of corruption on entrepreneurship in developed vs non-developed countries. *International Journal of Entrepreneurial Behaviour & Research*, 20(3), 237-262. <https://doi.org/10.1108/IJEBr-10-2012-0121>
- Aterido, R., Hallward-Driemeier, M., & Pagés, C. (2011). Big constraints to small firms' growth? Business environment and employment growth across firms. *Economic Development and Cultural Change*, 59(3), 609-647. Boudreaux, C. J., Nikolaev, B. N., & Holcombe, R. G. (2018). Corruption and destructive entrepreneurship. *Small Business Economics*, 51(1), 181-202. <https://doi.org/10.1007/s11187-017-9927-x>
- Bowen, H. P., & De Clercq, D. (2008). Institutional context and the allocation of entrepreneurial

- effort. *Journal of International Business Studies*, 39(4), 747–767.
<https://doi.org/10.1057/palgrave.jibs.8400343>
- Busenitz, L. W., Gómez, C., & Spencer, J. W. (2000). Country Institutional Profiles: Unlocking Entrepreneurial Phenomena. *Academy of Management Journal*, 43(5), 994–1003.
<https://doi.org/10.5465/1556423>
- Chowdhury, F., Audretsch, D. B., & Belitski, M. (2019). Institutions and Entrepreneurship Quality. *Entrepreneurship Theory and Practice*, 43(1), 51–81.
- Chowdhury, R. M. M. I. (2019). The Moral Foundations of Consumer Ethics. *Journal of Business Ethics*, 158(3), 585–601. <https://doi.org/10.1007/s10551-017-3676-2>
- Adomako, S., Ahsan, M., Amankwah-Amoah, J., Danso, A., Kesse, K., & Frimpong, K. (2021). Corruption and SME growth: the roles of institutional networking and financial slack. *Journal of Institutional Economics*, 17(4), 607–624.
- Crombach, L., & Smits, J. (2024). The Subnational Corruption Database: Grand and petty corruption in 1,473 regions of 178 countries, 1995–2022. *Scientific Data*, 11(1), 686.
<https://doi.org/10.1038/s41597-024-03505-8>
- Dacin, M. T., Ventresca, M. J., & Beal, B. D. (1999). The Embeddedness of Organizations: Dialogue & Directions. *Journal of Management*, 25(3), 317–356.
<https://doi.org/10.1177/014920639902500304>
- Dakhli, M., & De Clercq, D. (2004). Human capital, social capital, and innovation: A multi-country study. *Entrepreneurship & Regional Development*, 16(2), 107–128.
<https://doi.org/10.1080/08985620410001677835>
- Dau, L. A., & Cuervo-Cazurra, A. (2014). To formalize or not to formalize: Entrepreneurship and pro-market institutions. *Journal of Business Venturing*, 29(5), 668–686.
<https://doi.org/10.1016/j.jbusvent.2014.05.002>
- Dejardin, M., & Laurent, H. (2024). Entry-regulation and corruption: Grease or sand in the wheels of entrepreneurship? Fresh evidence according to entrepreneurial motives. *Small Business Economics*, 62(3), 1223–1272. <https://doi.org/10.1007/s11187-023-00802-1>
- Delios, A., Malesky, E. J., Yu, S., & Riddler, G. (2024). Methodological errors in corruption research: Recommendations for future research. *Journal of International Business Studies*, 55(2), 235–251.
<https://doi.org/10.1057/s41267-023-00637-8>
- Dempster, G., & Isaacs, J. (2017). Entrepreneurship, corruption and economic freedom. *Journal of Entrepreneurship and Public Policy*, 6(2), 181–192. <https://doi.org/10.1108/JEPP-08-2016-0030>
- Desai, S., Acs, Z. J., & Weitzel, U. (2013). A Model of Destructive Entrepreneurship: Insight for Conflict and Postconflict Recovery. *Journal of Conflict Resolution*, 57(1), 20–40.
<https://doi.org/10.1177/0022002712464853>
- Dreher, A., & Gassebner, M. (2013). Greasing the wheels? The impact of regulations and corruption on firm entry. *Public Choice*, 155(3), 413–432. <https://doi.org/10.1007/s11127-011-9871-2>
- Dreher, A., Kotsogiannis, C., & McCorriston, S. (2009). How do institutions affect corruption and the shadow economy? *International Tax and Public Finance*, 16(6), 773–796.
<https://doi.org/10.1007/s10797-008-9089-5>
- Dutta, N., & Sobel, R. (2016). Does corruption ever help entrepreneurship? *Small Business*

- Economics*, 47(1), 179–199. <https://doi.org/10.1007/s11187-016-9728-7>
- Estrin, S., Korosteleva, J., & Mickiewicz, T. (2013). Which institutions encourage entrepreneurial growth aspirations? *Journal of Business Venturing*, 28(4), 564–580. <https://doi.org/10.1016/j.jbusvent.2012.05.001>
- Friedman, E., Johnson, S., Kaufmann, D., & Zoido-Lobaton, P. (2000). Dodging the grabbing hand: The determinants of unofficial activity in 69 countries. *Journal of Public Economics*, 76(3), 459–493. [https://doi.org/10.1016/S0047-2727\(99\)00093-6](https://doi.org/10.1016/S0047-2727(99)00093-6)
- Garmroudesfandiari, E., Baghersad, V., & Akbari, M. (2025). Unlocking entrepreneurial potential: Unveiling the role of both types of institutional forces. *Journal of Global Entrepreneurship Research*, 15(1), 14. <https://doi.org/10.1007/s40497-025-00430-x>
- Ghura, H., Harraf, A., Li, X., & Hamdan, A. (2019). The moderating effect of corruption on the relationship between formal institutions and entrepreneurial activity: Evidence from post-communist countries. *Journal of Entrepreneurship in Emerging Economies*, 12(1), 58–78. <https://doi.org/10.1108/JEEE-03-2019-0032>
- Gonzalez-Tamayo, L. A., Olarewaju, A. D., Bonomo-Odizzio, A., & Krauss-Delorme, C. (2024). University student entrepreneurial intentions: The effects of perceived institutional support, parental role models, and entrepreneurial self-efficacy. *Journal of Small Business and Enterprise Development*, 31(8), 205–227. <https://doi.org/10.1108/JSBED-09-2022-0408>
- Hitt, M. A., Lee, H., & Yucel, E. (2002). The Importance of Social Capital to the Management of Multinational Enterprises: Relational Networks Among Asian and Western Firms. *Asia Pacific Journal of Management*, 19(2), 353–372. <https://doi.org/10.1023/A:1016247920461>
- Hunt, R. A. (2015). Contagion Entrepreneurship: Institutional Support, Strategic Incoherence, and the Social Costs of Over-Entry. *Journal of Small Business Management*, 53(S1), 5–29. <https://doi.org/10.1111/jsbm.12183>
- IBM. (n.d.). IBM SPSS software. Retrieved August 15, 2025, from <https://www.ibm.com/products/spss>
- Legatum Institute. (n.d.). Index methodology. *Legatum Prosperity Index 2023*. Retrieved August 15, 2025, from <https://index.prosperity.com/about/methodology>
- Manolova, T. S., Eunni, R. V., & Gyoshev, B. S. (2008). Institutional environments for entrepreneurship: Evidence from emerging economies in Eastern Europe. *Entrepreneurship theory and practice*, 32(1), 203–218.
- Lerner, J., & Schoar, A. (Eds.). (2010). *International differences in entrepreneurship*. University of Chicago Press. <https://doi.org/10.7208/chicago/9780226473109.001.0001>
- Ishaq, M. I., Sarwar, H., Aftab, J., Franzoni, S., & Raza, A. (2024). Accomplishing sustainable performance through leaders' competencies, green entrepreneurial orientation, and innovation in an emerging economy: Moderating role of institutional support. *Business Strategy and the Environment*, 33(2), 1515–1532. <https://doi.org/10.1002/bse.3557>
- Jauregui, A., Heriot, K. C., & Mitchell, D. T. (2021). Corruption and formal-sector entrepreneurship in a middle-income country: Spatial analysis of firm births in the Mexican states. *Small Business Economics*, 57(4), 1957–1972. <https://doi.org/10.1007/s11187-020-00388-y>
- Kazumi, T., & Kawai, N. (2017). Institutional support and women's entrepreneurial self-efficacy.

- Asia Pacific Journal of Innovation and Entrepreneurship*, 11(3), 345–365. <https://doi.org/10.1108/APJIE-12-2017-041>
- Klapper, L., Amit, R., & Guillén, M. F. (2010). Entrepreneurship and Firm Formation across Countries. In *International Differences in Entrepreneurship* (pp. 129–158). University of Chicago Press.
- Kuratko, D. F., & Covin, J. G. (2025). Fifty years of entrepreneurship: Recalling the past, examining the present, & foreshadowing the future. *Journal of Business Research*, 186, 114980. <https://doi.org/10.1016/j.jbusres.2024.114980>
- Demirgüç-Kunt, A., & Maksimovic, V. (2002). Law, finance, and firm growth. *The Journal of Finance*, 53(6), 2107–2137. <https://doi.org/10.1111/0022-1082.00084>
- Lowrey, Y. (2004). *Business Density, Entrepreneurship and Economic Well-Being* (SSRN Scholarly Paper No. 744804). Social Science Research Network. <https://doi.org/10.2139/ssrn.744804>
- Matsuda dos Santos, M., & Peterson, M. (2025). Data-Driven Configurations of Global Prosperity. *Journal of Macromarketing*, 02761467251360179. <https://doi.org/10.1177/02761467251360179>
- Michael Fritsch. (2008). How does new business formation affect regional development? Introduction to the special issue. *Small Business Economics*, 30(1), 1–14. <https://doi.org/10.1007/s11187-007-9057-y>
- Mohammadi Khyareh, M. (2017). Institutions and entrepreneurship: The mediating role of corruption. *World Journal of Entrepreneurship, Management and Sustainable Development*, 13(3), 262–282. <https://doi.org/10.1108/WJEMSD-09-2016-0045>
- Mohd Noor, N. H., Mohamad Fuzi, A., & El Ashfahany, A. (2023). Institutional support and self-efficacy as catalysts for new venture performance: A study of iGen entrepreneurs. *Journal of Entrepreneurship and Public Policy*, 12(3/4), 173–196. <https://doi.org/10.1108/JEPP-02-2023-0015>
- North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511808678>
- North, D. C. (1991). Institutions. *Journal of Economic Perspectives*, 5(1), 97–112. <https://doi.org/10.1257/jep.5.1.97>
- Olarewaju, T., Tamvada, J. P., McDowall-Emefiele, S., & Swaray, R. (2025). Perception of corruption as a business obstacle, generalized trust and relation centrism in low- and middle-income nations: The moderating influence of governance. *Review of Managerial Science*, 19(6), 1599–1635. <https://doi.org/10.1007/s11846-024-00802-9>
- Hamilton, A., & Hammer, C. (2018). *Can we measure the power of the grabbing hand? A comparative analysis of different indicators of corruption* (Policy Research Working Paper No. 8299). World Bank. <https://hdl.handle.net/10986/29162>
- Lowrey, Y. (2004). Business density, entrepreneurship and economic well being. *Entrepreneurship and Economic Well-Being* (June 2004).
- Posit. (n.d.). *Posit*. Retrieved August 15, 2025, from <https://www.posit.co/>
- Pramanik, P., Jana, R. K., & Ghosh, I. (2024). Enablers of new business density: A comparison between developed and developing countries using deep learning and explainable AI. *Benchmarking: An International Journal*. <https://doi.org/10.1108/BIJ-11-2023-0830>

- Hayes, A. F. (n.d.). The PROCESS macro for SPSS, SAS, and R. PROCESS macro. Retrieved August 15, 2025, from <http://processmacro.org/>
- Legatum Institute. (n.d.). Prosperity Index. Legatum Prosperity Index. Retrieved August 15, 2025, from <https://index.prosperity.com/about-prosperity/prosperity-index>
- Levie, J., & Autio, E. (2011). Regulatory burden, rule of law, and entry of strategic entrepreneurs: An international panel study. *Journal of Management Studies*, 48(6), 1392-1419.
- Rupasingha, A., Goetz, S. J., & Freshwater, D. (2006). The production of social capital in US counties. *The Journal of Socio-Economics*, 35(1), 83–101. <https://doi.org/10.1016/j.socec.2005.11.001>
- Estrin, S., & Mickiewicz, T. (2012). Shadow economy and entrepreneurial entry. *Review of Development Economics*, 16(4), 559-578.
- Shu, C., De Clercq, D., Zhou, Y., & Liu, C. (2019). Government institutional support, entrepreneurial orientation, strategic renewal, and firm performance in transitional China. *International Journal of Entrepreneurial Behavior & Research*, 25(3), 433–456. <https://doi.org/10.1108/IJEBR-07-2018-0465>
- Shu, C., Wang, Q., Gao, S., & Liu, C. (2015). Firm Patenting, Innovations, and Government Institutional Support as a Double-Edged Sword. *Journal of Product Innovation Management*, 32(2), 290–305. <https://doi.org/10.1111/jpim.12230>
- Simkins, T. J., & Peterson, M. (2016). Assessing the Value of a Societal-Level Sustainability Index for Macromarketing Research. *Journal of Macromarketing*, 36(1), 78–95. <https://doi.org/10.1177/0276146715586834>
- Sobel, R. S., Clark, J. R., & Lee, D. R. (2007). Freedom, barriers to entry, entrepreneurship, and economic progress. *The Review of Austrian Economics*, 20(4), 221–236. <https://doi.org/10.1007/s11138-007-0023-3>
- Stephan, U., Uhlaner, L. M., & Stride, C. (2015). Institutions and social entrepreneurship: The role of institutional voids, institutional support, and institutional configurations. *Journal of International Business Studies*, 46(3), 308–331. <https://doi.org/10.1057/jibs.2014.38>
- Transparency International. (n.d.). 2017 Corruption Perceptions Index. Retrieved August 15, 2025, from <https://www.transparency.org/en/cpi/2017>
- Treisman, D. (2007). What Have We Learned About the Causes of Corruption from Ten Years of Cross-National Empirical Research? *Annual Review of Political Science*, 10(Volume 10, 2007), 211–244. <https://doi.org/10.1146/annurev.polisci.10.081205.095418>
- Vyrostková, L., & Kádárová, J. (2023). Entrepreneurship Dynamics: Assessing the Role of Macroeconomic Variables on New Business Density in Euro Area. *International Journal of Financial Studies*, 11(4), Article 4. <https://doi.org/10.3390/ijfs11040139>
- Welter, F. (2011). Contextualizing Entrepreneurship—Conceptual Challenges and Ways Forward. *Entrepreneurship Theory and Practice*, 35(1), 165–184. <https://doi.org/10.1111/j.1540-6520.2010.00427.x>
- Wilhelm, P. G. (2002). International Validation of the Corruption Perceptions Index: Implications for Business Ethics and Entrepreneurship Education. *Journal of Business Ethics*, 35(3), 177–189. <https://doi.org/10.1023/A:1013882225402>
- Wittberg, E., Erlingsson, G. Ó., & Wennberg, K. (2024). Does local government corruption

inhibit entrepreneurship? *Small Business Economics*, 62(2), 775–806. <https://doi.org/10.1007/s11187-023-00783-1>

World Bank. (n.d.). World Bank open data. Retrieved August 15, 2025, from <https://data.worldbank.org>

Zahra, S. A. (2007). Contextualizing theory building in entrepreneurship research. *Journal of Business Venturing*, 22(3), 443–452.

Zahra, S. A., & Wright, M. (2011). Entrepreneurship's Next Act. *Academy of Management Perspectives*, 25(4), 67–83. <https://doi.org/10.5465/amp.2010.0149>

Summary Brief

Signaling Diversity: The Impact of Pronoun Use and DEI Stances on Candidate Evaluation

Ross Murray, University of Charleston

Xiaojing Sheng, University of Texas Rio Grande Valley

As diversity, equity, and inclusion (DEI) initiatives become more prominent in the workplace, both employers and job candidates are adapting to new norms around identity and the job application process. While many employers aim to support DEI-focused hiring, identifying candidates who are likely to promote or support these initiatives remains challenging. One emerging practice is the declaration of pronouns (e.g., she/her, they/them) and the writing of a diversity statement. Prior research has explored the effects of pronoun declaration; however, little is known about how such declarations influence job candidates based on the DEI alignment with the hiring company. Our future study will examine the impacts of pronoun declaration and company policies on job candidates, with a focus on the consistency between candidates' DEI views, pronoun declarations, and the DEI policies of employers. The future study will analyze how these factors shape perceptions of the job candidate.

Keywords:

Pronoun Declaration, Diversity Statements, DEI Hiring Practices, Candidate-Employer Value Alignment, Workplace Diversity Perceptions

Summary Brief

Applying the Theory of Planned Behavior to Understand Consumer Medical Waste Disposal Practices: Implications for Social Marketing Strategies

Gary Daniel Futrell, Valdosta State University, USA

The improper disposal of pharmaceutical waste (expired, unused, and contaminated drugs and vaccines) by consumers has emerged as a critical issue with far-reaching environmental, public health, and societal implications. This study applies the Theory of Planned Behavior to investigate consumer medical waste disposal behaviors.

The improper disposal of pharmaceutical waste (expired, unused, and contaminated drugs and vaccines) by consumers has emerged as a critical issue with far-reaching environmental, public health, and societal implications (Karim-Nejad & Pangilinan, 2022). Pharmaceuticals that are not disposed of are at risk of being misused, abused or ingested by accident (Center for Drug Evaluation and Research, 2024). Pharmaceuticals discarded through inappropriate methods, such as flushing them down toilets or throwing them into household trash, have been found to contaminate water systems, soil, and ecosystems (Karim-Nejad & Pangilinan, 2022). This contamination poses significant risks, including harm to aquatic life, the proliferation of antimicrobial resistance, and potential adverse effects on human health (Yazie et al., 2024). As global medication use continues to rise, addressing the challenges of pharmaceutical waste disposal has become more urgent than ever. The management of healthcare waste aligns with several UN Sustainable Development Goals, particularly SDG 3-Good Health and Well-being and SDG 6-Clean Water and Sanitation (Healthcare Waste, n.d.).

While it acknowledges the potential impact it may have on the environment, the US Federal Drug Administration (FDA) supports household disposal methods that contribute to the exposure of drugs to the environment and landfill leachate (Karim-Nejad & Pangilinan, 2022). Though the agency supports trashing or flushing pharmaceuticals, it suggests that “the best way to dispose of most types of unused or expired medicines (both prescription and over-the-counter) is to immediately use a take-back option” (Center for Drug Evaluation and Research, 2024).

Unfortunately, many consumers continue to hold, dump or flush unused or expired medication. A 2016 study by the health care provider Geisinger found that only 11% of unused medication was disposed of via drug take-back programs, whereas the majority was held in the home (55%), dumped in the trash (14%), or flushed down the toilet (9%) (Study Highlights Most Common Medications Left Unused by Patients, 2016). Understanding the drivers of consumer behavior in this context is essential for designing effective interventions that mitigate the environmental and health risks associated with pharmaceutical waste.

To the author’s knowledge the issue of household pharmaceutical waste disposal has not been investigated from a marketing or consumer behavior perspective. This study seeks to fill this critical gap by applying the Theory of Planned Behavior to investigate consumer medical waste disposal behaviors.

Based on TPB, the following research propositions are proposed:

- Proposition 1. Attitude towards medical waste disposal has a direct positive relationship to behavioral intention of using a drug take-back program
- Proposition 2. Subjective norms have a direct positive relationship to behavioral intention of using a drug take-back program
- Proposition 3. Perceived behavioral control has a direct positive relationship to behavioral intention of using a drug take-back program
- Proposition 4. Behavioral intention has a direct positive relationship to actual disposal behavior
- Proposition 5. Environmental concern moderates the relationship between behavioral intention and actual disposal behavior

KEYWORDS: Pharmaceutical waste, Medical waste, Theory of planned behavior, Consumer behavior

REFERENCES

- Center for Drug Evaluation and Research. (2024, October 31). Disposal of Unused Medicines: What You Should Know. FDA; FDA. <https://www.fda.gov/drugs/safe-disposal-medicines/disposal-unused-medicines-what-you-should-know>
- Healthcare waste. (n.d.). Retrieved December 14, 2024, from <https://www.who.int/news-room/fact-sheets/detail/health-care-waste>
- Karim-Nejad, L., & Pangilinan, K. (2022). How Should Responsibility for Proper Medication Disposal Be Shared? *AMA Journal of Ethics*, 24(10), E971-979. <https://doi.org/10.1001/amajethics.2022.971>
- Study highlights most common medications left unused by patients. (2016, April 4). <https://www.geisinger.org/about-geisinger/news-and-media/news-releases/2016/09/01/15/41/study-highlights-most-common-medications-left-unused-by-patients>
- Yazie, T. S., Siyum, Z., Assefa, A., Teshome, A. A., Belete, A. M., & Debasu Addisu, Z. (2024). Disposal practices, knowledge and attitude of adult patients visiting outpatient pharmacy services towards unused medicines in Debre Tabor, Northwest Ethiopia: A descriptive cross-sectional study. *BMJ Open*, 14(10), e085124. <https://doi.org/10.1136/bmjopen-2024-085124>

**SESSION 22.4: PHILOSOPHY TO PRACTICE:
NAVIGATING DIGITAL WELLNESS AND THE NEW
REAL**

Moderators:

Kelley Cours Anderson

Summary Brief

Possibly, Probably, and Preferably: Pleas and Postulations on Embedding Philosophy in Education

Dr. Ross Murray, University of Charleston

This paper explores the current and potential role of philosophy in education, advocating for its earlier and more deliberate integration into curricula. Anchored by a compelling anecdote of a student gently petting a bumblebee—a moment prompting reflection on epistemology and ontological assumptions—the paper examines how traditional educational systems often constrain student thinking through rigid categorization and positivist frameworks. It critiques the absence of philosophical training in early education and argues that this gap fosters overconfidence, dogmatic thinking, and limited critical reflection. The paper outlines what is possible, probable, and preferable for philosophy's place in education, suggesting that early exposure to philosophical inquiry could cultivate epistemic humility, intellectual openness, and deeper understanding. Ultimately, the paper urges educators and policymakers to reconsider the structure of education to foster a generation better equipped to question reality, challenge assumptions, and continually seek more understanding.

Keywords:

Philosophy in education, epistemology, ontology, curriculum reform, critical thinking, epistemic humility

Summary Brief

Is This Real? The Impending Transition from Distinguishable to Indistinguishable

Dr. Ross Murray, University of Charleston

As emerging technologies become increasingly capable of simulating reality, consumers may soon face an existential shift in how they interpret experience, authenticity, and truth. This paper explores the convergence of corporeal and digital realities through the lens of innovations such as artificial intelligence, virtual and augmented reality, and brain–computer interfaces. The progression of these technologies blurs the line between what is real and what is artificial, potentially giving rise to pseudo-real experiences that are indistinguishable from physical reality. Drawing from theories such as the uncanny valley and simulation hypothesis, this work investigates how deepfakes, hyperreal content, and immersive environments may disrupt not only consumer behavior and market dynamics but also societal norms. Novelty effects and the potential for addiction are examined alongside implications for religion, healthcare, and the future of human connection. Ultimately, the paper suggests that as the physical and digital worlds converge, consumers may need new philosophical insights and regulatory guidelines to navigate what it means to live meaningfully in an age of simulated experience.

Keywords:

Emerging Technologies, Simulated Reality, Uncanny Valley, Hyperreal Content, Market Disruption

SESSION 22.5: PARADOX MINDS: BEAUTY, BACKLASH, AND ANTI-CONFORMITY

Moderators:

Hongnai Zhang

Full Paper

THE IMPACT OF SUSTAINABILITY PRACTICES ON PURCHASE INTENTION

Sarah Slough, University of Alabama at Birmingham, USA

As consumer's awareness of sustainability increases, it's increasingly important for businesses to understand what sustainability trends actually matter to their customer base. This is especially notable in the purchasing behavior of Generation Z, who are one of the most socially and environmentally conscious generations today. Generation Z holds an incredible amount of purchasing power, so it's integral that businesses understand exactly what drives their purchase intention.

This study explores the influence of sustainability practices on the purchase intentions of Generation Z, a demographic increasingly recognized for its environmental and ethical concerns. The research draws on the Triple Bottom Line (TBL) framework, focusing on the social and environmental dimensions to assess their impact on consumer behavior. Key areas examined include environmental sustainability, operationalized through Green Supply Chain Management (GSCM), and social sustainability, which emphasizes fair wages, safety policies, and ethical practices.

For this study, 32 survey participants from the University of Alabama at Birmingham answered questions pertaining to sustainability practices and purchase intention. After analysis of the results, it was found that both environmental sustainability and social sustainability have a significant effect on the purchase intention of Generation Z. By addressing gaps in the literature, this study advances understanding of how targeted sustainability initiatives can shape purchasing decisions.

INTRODUCTION

The issue of sustainability is becoming increasingly important for businesses as younger generations become more aware of their impact on the environment (Djafarova & Foots, 2022). This has put pressure on businesses to react to the customer's concern for the environment (Al-Haddad, Abdel-Aziz, Al-Khasawneh, Maraqa & Hashem, 2022). This increase in awareness has also caused a preference towards products and brands that are perceived to be sustainable and environmentally friendly (Huda, Hartati, Gunawan & Luthfi, 2023). As consumer needs and values change, it is important for businesses to recognize this shift and learn how to adapt their marketing strategies to bring in new customers. Research has shown that businesses that practice sustainability are able to build strong relationships with customers, which heightens purchase intent (Unal & Tascioglu, 2022). This could also have significant implications for businesses as consumers have shown a higher willingness to pay towards sustainable products (Huda et al., 2023). This is especially notable when organizations are perceived as credible when it comes to sustainability claims (Matin, 2024). However, current research has yet to explore which sustainability practices affect purchase intention the most (Martin, 2024).

The theoretical basis of this research is based on research about purchase intention by Martin (2024) and literature on sustainability practices. These literatures show that sustainability practices have an impact on consumers, especially within younger generations (Saran, Kashyap & Singh, 2023). In particular, members of the Generation Z cohort show a growing concern with both environmental and ethical issues (De Jesus, Merle, Monedera, Nicdao & Etrata, 2024). This study will contribute to the literature by investigating the relationship between different sustainability practices on Generation Z purchase intention, particularly in the context of the social and environmental aspects of the triple bottom line (TBL). It's important to note that while different aspects of the TBL are being observed, all aspects of the TBL provide value to each other in a business context. Therefore, they are most effective when used together (Solovida & Latan, 2021). A review of the current literature on these topics was performed, and a study on the relationship between different sustainability practices and Generation Z purchase intention was shown. To test the proposed hypotheses, 32 students from the University of Alabama at Birmingham were surveyed, and the data was then analyzed using linear regression. All three positive relationships from the hypotheses were supported by the data, and practical implications and future recommendations are given.

LITERATURE REVIEW

This literature review examines the effect that specific types of sustainability practices have on Generation Z's purchase intention. This issue is significant because younger generations are becoming more concerned with sustainability and showing higher levels of green purchase intention, especially when they think a product is green. (De Jesus et al., 2024). Generation Z outnumbers Generation Y by a significant amount, and their buying power is over 5-fold that of the previous generations (Djafarova). Because of this rise in concern, businesses must learn to orient their business practices in a way that will appeal to this large customer base. As discussed earlier, sustainability practices lead to a strong relationship with customers, which in turn creates higher purchase intent. Sustainability itself is a broad term, which can make it complicated for businesses to build a proper framework to adhere to. This research will use the TBL to define and direct sustainability parameters. The TBL has three facets: economic, social, and environmental (Sarkis, Helms & Hervani, 2010). This research is focused on the effect that social and environmental sustainability practices have on purchase intention. The sections that follow address the following variables that are part of the research design, as seen in Figure 1. These are environmental sustainability, social sustainability, and purchase intention.

Environmental Sustainability

Environmental sustainability is defined as reducing harmful impacts on the environment (Al-Haddad et al., 2022). Environmental sustainability has been studied in previous research and has shown a positive relationship with purchase intention (Al-Haddad et al., 2022). Additionally, environmental sustainability has been shown to positively affect brand reputation, which leads to a positive perception by the consumer (Unal & Tascioglu, 2022). This research will focus on green supply chain management as the measurement for sustainability.

Green Supply Chain Management, or GSCM, is a way of conducting business that emphasizes sustainably sourced materials, environmentally friendly manufacturing procedures, and creating sustainable products (Sugandini, Muafi, Susilowati, Siswanti & Syafri, 2020). GSCM has constantly evolved since its inception in the late 20th century, and today, it includes many key concepts, including green manufacturing and waste management (Mutingi, 2013). In particular, carbon management stands out as a major component that can affect customer engagement (Lintukangas, Arminen, Kähkönen & Karttunen, 2023). Some standards, like the ISO14000 series standard, attempt to define and direct environmentally sustainable habits for companies around the world (Mutingi). In a study done by Sugandini et al. (2020), green marketing campaigns that highlighted the use of GSCM showed an increase in purchase intention.

Social Sustainability

Social sustainability is a facet of the TBL that focuses on the well-being and rights of those in the industry (Shaharudin, Hamid, Abdullah, Ahmed, Hassam & Fauzi, 2022). Social sustainability focuses on managing relationships, human capital, and social values (Sarkis, Helms & Hervani, 2010). Practices that fall under this category include fair wages, adequate benefits, and safety policies (Arowoshegbe, Uniamikogbo & Gina, 2018; Heide Skróder, Steffen, Hauschild & Ryberg, 2023). International standards, like the Occupational Health and Safety Assessment Series standards (OHSAS18000), provide guidance for certain aspects of social sustainability (Mutingi, 2013). However, in this measure of sustainability, companies are often expected to voluntarily go above and beyond legal requirements, and instead focus on socially acceptable approaches to these practices (Al-Haddad et al., 2022). It's important to note that while these are the most visible and measurable aspects of social sustainability, less tangible things like communication and respect are needed to truly reach social sustainability (Schönborn, Berlin, Pinzane, Hanish, Georgoulas & Lanz, 2018). Due to these limitations, this study will focus on the former social topics as opposed to the latter.

This aspect of the TBL garners the least attention, however it is important to factor in social needs to determine if a product is truly sustainable (Heide et al., 2023). Ignoring the social aspect of sustainability can damage reputation within an industry, which in turn impacts sales and profitability (Shaharudin et al., 2022).

Purchase Intention

Purchase intention is a measure of consumer behavior that specifically involves attitude to buy after evaluation (Martin, 2024). This study will specifically examine the purchase intention of Generation Z (people born from 1995 to 2010) due to the fact that Generation Z makes up a third of the world's population (Robichaud & Yu, 2021). It has also been shown that Generation Z has a significant influence on the purchase intentions of those around them, which increases the significance of their perspective (Robichaud & Yu, 2021). A study done by De Jesus et al. (2024) shows that Generation Z shows increased intent to purchase when they perceive apparel to be

environmentally and socially sustainable. This study looks to expand these findings beyond the apparel market into all aspects of consumerism. Other studies have found that purchase intention can actually be lower with companies that are not socially responsible (Al-Haddad et al., 2022)

RESEARCH DESIGN

The proposed research framework is seen in Figure 1. This framework addresses the relationship between environmental sustainability, social sustainability, and purchase intention. The first relationship is between environmental sustainability and purchase intention. The subcomponent of environmental sustainability is GSCM. This relationship is hypothesized as positive, given that previous research has had similar findings as it related to sustainability and purchase intention. Therefore, the following hypotheses are given:

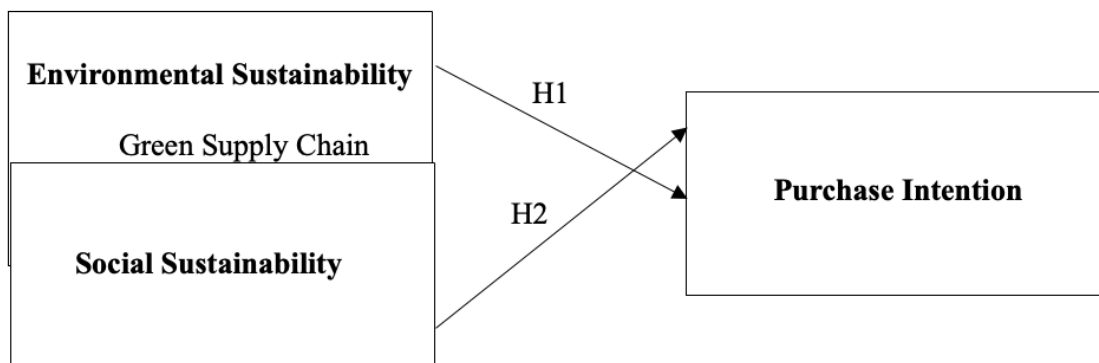
H1.0 Environmental sustainability practices have a positive relationship with purchase intention.

H1.1 GSCM has a positive relationship with purchase intention.

In the next relationship in the framework, social sustainability is compared with purchase intention. This relationship is hypothesized to be positive based on similar findings surrounding sustainability and purchase intention. The following hypothesis is given:

H2.0 Social sustainability has a positive relationship with purchase intention.

Figure 1



METHODOLOGY

In order to test the hypotheses for this research, a survey (appendix I) was created and distributed to 32 Generation Z students at the University of Alabama at Birmingham. The survey, which was created on Qualtrics, was comprised of fourteen questions. Of the fourteen questions, three were focused on demographics, six were focused on environmental sustainability and purchase intention, and five were focused on social sustainability and purchase intention. With the exception of the demographic questions, questions were measured using a seven-point Likert scale, ranging from strongly disagree (1) to strongly agree (7).

DATA ANALYSIS

Results from the survey were compiled and analyzed in Microsoft Excel using simple linear regression. The questions that were aimed at each hypothesis were compiled into composite variables that were then run against the dependent variable, purchase intention. The following tables show the results of these analyses.

Table 1.1

Regression Statistics								
Multiple R	0.79993345							
R Square	0.63989352							
Adjusted R Sq	0.62747605							
Standard Error	1.04763719							
Observations	31							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	56.5583302	56.5583302	51.5317354	6.6775E-08			
Residual	29	31.8287665	1.09754367					
Total	30	88.3870968						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-3.5382521	1.02704656	-3.4450746	0.00176062	-5.6387981	-1.437706	-5.6387981	-1.437706
Envi	1.35516172	0.18877903	7.17856082	6.6775E-08	0.96906526	1.74125818	0.96906526	1.74125818

The first analysis focuses on the relationship between sustainability practices and purchase intention. The relationship between environmental sustainability practices and the purchase intention was significant. The model explained 63.99% of the variance ([Equation]), indicating a strong fit. Environmental Sustainability Practices had a positive effect ($b = 1.3556$), with a highly significant p-value ($p < 0.001$). The confidence interval [0.9691, 1.7413] confirmed this effect. Note that only 31 responses were kept for this model. This is due to the fact that one of the respondents failed to answer a question in this section of the survey. Because the data set was already small, it was decided that the best course of action was to entirely remove the response from this section.

Table 1.2

Regression Statistics								
Multiple R	0.74506009							
R Square	0.55511453							
Adjusted R Sq	0.54028502							
Standard Error	1.1552733							
Observations	32							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	49.9603079	49.9603079	37.433086	1.0023E-06			
Residual	30	40.0396921	1.3346564					
Total	31	90						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-2.3987759	1.02552852	-2.339063	0.0261838	-4.4931845	-0.3043672	-4.4931845	-0.3043672
GCSM	1.15515163	0.18880399	6.11825841	1.0023E-06	0.76956243	1.54074083	0.76956243	1.54074083

The second analysis looks closer at the relationship GSCM has on purchase intention within the context of environmental sustainability. This relationship was also considered significant. The model explained 55.51% of the variance [Equation]. GCSM had also had a high impact on purchase intention ($b = 1.1552$) and a significant p-value ($p < 0.001$).

Table 1.3

Regression Statistics								
Multiple R	0.59931342							
R Square	0.35917658							
Adjusted R Sq	0.3378158							
Standard Error	1.25619572							
Observations	32							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	26.5341696	26.5341696	16.8147681	0.00028942			
Residual	30	47.3408304	1.57802768					
Total	31	73.875						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-1.5968858	1.39789344	-1.1423516	0.26234348	-4.4517651	1.25799346	-4.4517651	1.25799346
Social Sustain	0.98961938	0.24133635	4.10058144	0.00028942	0.49674479	1.48249397	0.49674479	1.48249397

The final table shows the relationship between social sustainability practices and purchase intention. The regression analysis revealed that social sustainability practices are a significant predictor of the dependent variable ($p < 0.001$). The model explained approximately 36% of the variance ($[Equation] = 0.36$).

The information revealed in this analysis shows that each of the three hypotheses can be considered supported. Each variable showed significant influence on purchase intention, especially for the variables focused on environmental sustainability.

DISCUSSION

This research examined the impact that different sustainability practices have on the purchase intention of Generation Z. After gathering data and conducting an analysis, all hypotheses indicating a positive relationship between different sustainability practices are supported. These findings are in line with other studies done on sustainability and purchase intention (De Jesus et al. 2024, Al-Haddad et al. 2022). Of the three hypotheses tested, it seemed that the relationship between environmental sustainability and purchase intention is the strongest, with $p=6.68E-08$. Although still significant, the relationship between purchase intention and social sustainability was much more moderate, with a p-value of $p=0.000289$. GCSM fell between the two with a p-value of $p=1.00E-06$. The difference in the results could be due to the fact that social sustainability is not nearly as popular as environmental sustainability. Environmental sustainability has been a massively popular topic for a long time, while social sustainability hasn't received the same attention. It could also be due to the fact that many factors of social sustainability, like fair wages, are highly political topics. This would influence someone's view on what they actually consider important to social sustainability.

Conclusion

This paper explored the effect of environmental and social sustainability on the purchase intention of Generation Z consumers. Data was gathered through a survey that was distributed to 32 students at the University of Alabama at Birmingham, and the results were analyzed using linear regression. The independent variables studied were environmental sustainability, green supply chain management, and social sustainability, and the dependent variable was purchase intention in Generation Z. Analysis showed that environmental and social sustainability both had significant effects on the purchase intention of Generation Z, although social sustainability was less significant than environmental sustainability.

Practical Implications

Based on this research, businesses can gain a better understanding of what drives the purchase intentions of Generation Z. Based on this research, businesses, and marketers could start to pivot some of their strategies to better align with the values that will draw the Generation Z consumer base. This paper shows that Generation Z wants to buy products from brands that practice multiple types of sustainability, which could greatly affect marketing and business plans for the future. If businesses are able to draw in more Generation Z customers, it would likely result in larger profits for the firm.

These results show that Generation Z consumers genuinely care about sustainable business practices. This shows that businesses should strive to not just have sustainable business practices, but also to showcase them and try to bring attention to the fact that they care about sustainability. These findings could greatly impact future marketing campaigns and decisions for businesses across all sectors, making the results of this paper highly significant to business practices.

Limitations and Future Research

This research, while positive, had some limitations that leave room for future research. First was the limited data set used for the results. Only 32 responses were collected for this research. Future studies could be conducted using the same survey with a much larger data set to confirm or contradict the findings of this paper. Another significant limitation was the diversity of the data set. All 32 respondents were business majors due to the fact that the survey was distributed as part of a marketing class. Future studies could include other disciplines across the university, as well as other non-students in Generation Z. Future studies could also expand on the survey, including additional questions to differentiate the different kinds of sustainability. Certain topics within each type of sustainability could also be researched to discover their individual impact on the purchase intention of Generation Z.

References

- Al-Haddad, S., Abdel-Aziz, A., Al-Khasawneh, M., Maraqa, R., & Hashem, R. (2022). The Influence of Corporate Social Responsibility on Consumer Purchase Intention: The Mediating Role of Consumer Engagement via Social Media. MDPI AG. <https://doi.org/10.3390/su14116771>
- Arowoshegbe, A. & Uniamikogbo, E. & Gina, O. (2018). SUSTAINABILITY AND TRIPLE BOTTOM LINE: AN OVERVIEW OF TWO INTERRELATED CONCEPTS.
- De Jesus, J. Y.,B., Merle, P. N. B., Monedera, E. U., Nicdao, R. A. F., & Etrata, A. E.,Jr. (2024). Generation Z's Purchase Intention Towards Green Apparel: The Mediating Role of Apparel Sustainability Knowledge and Green Perceived Value. Society of Interdisciplinary Business Research.
- Djafarova, E., & Foots, S. (2022). Exploring ethical consumption of generation Z: theory of planned behaviour. *Young Consumers*, 23(3), 413-431. <https://doi.org/10.1108/YC-10-2021-1405>
- Heide, M., Skröder, N., Steffen, S. F., Hauschild, M., & Ryberg, M. (2023). Framework for selecting and setting boundaries for social sustainability indicators in a life cycle perspective. *IOP Conference Series. Earth and Environmental Science*, 1196(1), 012080. <https://doi.org/10.1088/1755-1315/1196/1/012080>
- Huda, M., Hartati, N., Gunawan, A. I., & Luthfi, F. M. (2023). Revealing consumer attitudes towards green products: the role of environmental awareness, perceived value, and media influence on zero waste products purchase intentions. IOP Publishing. <https://doi.org/10.1088/1755-1315/1267/1/012009>
- Lintukangas, K., Arminen, H., Kähkönen, A., & Karttunen, E. (2023). Determinants of Supply Chain Engagement in Carbon Management: JBE. *Journal of Business Ethics*, 186(1), 87-104. <https://doi.org/10.1007/s10551-022-05199-7>
- Martin, C. (2024). The Credibility of Sustainability Claims: Does It Impact Purchase Intention?. ProQuest Dissertations Publishing.
- Mutingi, M. (2013). Developing green supply chain management strategies: A taxonomic approach. *Journal of Industrial Engineering and Management*, 6(2), 525. <https://doi.org/10.3926/jiem.475>
- Robichaud, Z., & Yu, H. (2022). Do young consumers care about ethical consumption? Modelling Gen Z's purchase intention towards fair trade coffee. *British Food Journal*, 124(9), 2740-2760. <https://doi.org/10.1108/BFJ-05-2021-0536>

- Sarkis, J., Helms, M. M., & Hervani, A. A. (2010). Reverse logistics and social sustainability. *Corporate Social - Responsibility and Environmental Management*, 17(6), 337.
<https://uab.idm.oclc.org/login?url=https://www.proquest.com/scholarly-journals/reverse-logistics-social-sustainability/docview/815579829/se-2>
- Schönborn, G., Berlin, C., Pinzone, M., Hanisch, C., Georgoulas, K., & Lanz, M. (2019). Why social sustainability counts: The impact of corporate social sustainability culture on financial success. *Sustainable Production and Consumption*, 17, 1-10.
- Shaharudin, M. R., Hamid, N. Z. A., Abdullah, D., Ahmad, N., Hassam, S. F., & Fauzi, N. H. H. A. (2022). FACTORS AFFECTING SOCIAL SUSTAINABILITY PERFORMANCE AMONGST MALAYSIAN MANUFACTURING COMPANIES. *International Journal of Business and Society*, 23(3), 1874-1887.
<https://doi.org/10.33736/iibs.5217.2022>
- Solovida, G. T., & Latan, H. (2021). Achieving triple bottom line performance: highlighting the role of social capabilities and environmental management accounting. [Triple bottom line performance] *Management of Environmental Quality*, 32(3), 596-611. <https://doi.org/10.1108/MEQ-09-2020-0202>
- Sugandini, D., Muafi, M., Susilowati, C., Siswanti, Y., & Syafri, W. (2020). Green supply management and green marketing strategy on green purchase intention: SMEs cases. *Journal of Industrial Engineering and Management*, 13(1), 79-92. <https://doi.org/10.3926/jiem.2795>
- Unal, U., & Tascioglu, M. (2022). Sustainable, therefore reputable: linking sustainability, reputation, and consumer behaviour. Emerald Group Publishing Limited. <https://doi.org/10.1108/MIP-03-2022-0102>

Full Paper

Exploring how Counter-Conformity Motivation Mediates the Relationship Between Need for Touch and eWoM Intentions Toward Digital Dress

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This study examines how the need for touch (NFT) influences electronic word-of-mouth (eWOM) intentions toward digital dresses virtual garments admired for their novelty yet questioned for their intangibility. Distinguishing itself from prior research, it proposes a framework where counter-conformity motivation (CCM) mediates this relationship. Adopting a mixed-methods approach, data will be gathered from digitally literate consumers through multi-phase sampling. Analysis will employ Partial Least Squares Structural Equation Modelling (PLS-SEM) and Fuzzy-set Qualitative Comparative Analysis (fsQCA). Theoretically, the study extends sensory marketing and consumer resistance literature into digital fashion, reframing tactile predispositions as potential drivers of online engagement. Practically, it offers actionable strategies for fashion brands, platform designers, and marketers to create immersive, identity-affirming virtual experiences that appeal to consumers navigating the tension between tangibility and digital innovation. This research bridges physical sensory needs with emerging digital consumption patterns.

Keywords: *need for touch, eWOM, counter-conformity motivation, fsQCA, digital dress*

Introduction

The digitalization of fashion has sparked widespread global discourse on the evolving ways clothing is consumed, perceived, and interacted with. The advent of virtual garments commonly referred to as digital dresses has extended the boundaries of fashion beyond physical textiles. This evolution, which is taking center stage and reshaping the fashion industry's foundations, is driven by advanced technologies such as augmented reality (AR), blockchain, and 3D rendering. It aligns with growing global demands for sustainability, personalization, and digital consumerism. Digitally native generations particularly Gen Z and Millennials are leveraging virtual spaces for self-expression, prompting fashion to evolve into a multi-sensory, waste-free, and eco-friendly experience. As the digital fashion industry is projected to reach \$4.8 billion by 2031 (Allied Market Research, 2023), it is evident that this is more than a fleeting trend; it represents a fundamental redefinition of identity, aesthetics, and value in the post-physical age.

Building on this premise, the current study explores the psychological and behavioral factors that influence consumers, particularly Gen Z, in their purchase and advocacy of digital dresses. While earlier research has addressed constructs such as fashion innovativeness, virtual self-presentation, and perceived value (Choi & Kim, 2021), a considerable gap remains in understanding motivational factors like the need for touch and counter-conformity motivation. Furthermore, the adoption of digital clothing beyond metaverse environments, especially in social media and across culturally diverse contexts, has received limited scholarly attention. Accordingly, this study investigates how psychological variables influence electronic word-of-mouth (eWoM) behavior within the context of digital dress consumption. Despite its increasing market relevance, the phenomenon of digital dress remains underexplored in academic literature, limiting insights for both practitioners and scholars regarding branding strategies and user experience design. Existing studies (e.g., Park et al., 2023; Sheng, 2023; Zou et al., 2022) are either heavily focused on metaverse platforms or culturally narrow in scope. A notable gap involves the lack of research on how sensory deprivation particularly the absence of tactile feedback impacts purchase intentions for digital products that traditionally rely on physical engagement, such as fashion. This study addresses both theoretical and managerial gaps by examining how deeper psychological motivations shape engagement with digital apparel.

A review of the literature reveals that few studies are grounded in both theoretical and empirical perspectives on digital fashion. Those that do exist often overlook motivational dynamics, especially outside of metaverse environments. Additionally, limited attention has been paid to how users incorporate personal desires—such as the need for sensory input or the drive for non-conformity—into behaviors like advocacy or eWoM. To this end, the current study poses the following research questions:

How do psychological constructs such as Need for Touch (NFT) and Counter-Conformity Motivation (CCM) influence engagement with or acceptance of digital dresses?

Does Counter-Conformity Motivation mediate the relationship between Need for Touch and digital fashion acceptance?

This research shifts the existing literature on digital fashion from a focus on general consumer interest to a more nuanced understanding of the psychological and behavioral mechanisms driving digital dress adoption—particularly among Gen Z consumers. Prior studies have mostly centered on surface-level factors like aesthetic appeal and virtual self-presentation (Choi & Kim, 2021; Baek et al., 2022), with limited exploration of intrinsic psychological motivations and their mediating effects on consumer advocacy behaviors such as eWoM. In contrast, this study introduces a unique conceptual framework that integrates three theoretically significant yet underexplored constructs—Need for Touch, Counter-Conformity Motivation, and eWoM—to examine both the initial adoption of digital fashion and the broader diffusion of this innovation through consumer sentiment.

Theoretically, the inclusion of Need for Touch—a construct traditionally associated with physical retail environments (Peck & Childers, 2003)—into a post-physical consumption context challenges prior assumption in sensory marketing. This reconceptualization suggests that even in dematerialized experiences, tactile predispositions continue to play a significant role in consumers’ cognitive evaluations and behavioral intentions. Simultaneously, the application of Counter-Conformity Motivation—a construct rooted in consumer resistance and identity signaling (Tian et al., 2001)—provides a critical lens for understanding digital dress adoption not merely as a technological novelty, but as a medium for social differentiation and self-authentication in digital spaces.

Practically, the study offers actionable insights for fashion brands, digital platform designers, and marketers operating within Web 3.0 environments. By uncovering the motivational antecedents of digital dress engagement, it enables firms to craft strategies that resonate with consumers’ deeper psychological drivers, beyond aesthetics and uniqueness. For instance, platforms might develop immersive experiences that simulate tactile interaction, while branding campaigns could leverage counter-conformity appeals to enhance community identity and exclusivity. Moreover, by empirically examining how Counter-Conformity Motivation mediates the relationship between Need for Touch and eWoM, the study presents an analytical model valuable for market segmentation, personalization, and influencer marketing strategies in the digital fashion space.

In conclusion, this research marks a significant step in advancing theoretical understanding by recontextualizing well-established constructs within the emerging domain of digital consumption. It addresses urgent managerial questions related to consumer engagement, innovation diffusion, and market penetration. By bridging existing gaps in literature on sensory, motivational, and digital consumer behavior, the study not only extends the conceptual boundaries of fashion theory but also contributes to evidence-based innovation in digital retail strategy.

Theoretical Background and Hypotheses

The concept of digital dress

Digital dress can be defined as the convergence of 3D virtual technologies and fashion, where garments exist solely in digital form, enhancing appearance, functionality, and interactivity for the wearer (Chan, 2024). More broadly, digital fashion encompasses the application of digital technologies across various facets of the fashion industry, including product development, marketing, communication, and the creation of virtual garments and accessories (Rosato & Calleo, 2023). A prominent example of this trend is Nike’s acquisition of RTFKT, a pioneering brand that merges advanced technology with cultural and gaming influences to produce high-end digital collectibles (Nike, 2021). The fashion industry is increasingly leveraging technologies such as 3D body scanning to generate digital models and dress forms, facilitating improved design processes, pattern-making, and fit analysis (Vuruskan & Ashdown, 2017). Additionally, researchers are developing virtual dressing rooms that allow consumers

to digitally try on clothing items, thereby enhancing the shopping experience (Sapio et al., 2018).



Source: <https://vogue.sg/digital-fashion-houses/>



Source: <https://www.forbes.com/sites/stephaniehirschmiller/2022/11/21/zero10-launches-ar-digital-fashion-platform/>

Figure 1: Digital Dress. Source: (Vogue,2021; Hirschmiller,2022)

Need for Touch and Counter-conformity Motivation

The Need for Touch (NFT) refers to consumers' preference for acquiring information through tactile or haptic experiences, driven by motivations such as problem-solving, sensory enjoyment, fantasy, and arousal (Peck & Childers, 2003). In essence, NFT captures an individual's inclination to physically interact with products before making purchase decisions. This tendency is particularly significant in the traditional fashion industry, where the tactile properties of fabric and garment fit heavily influence consumer behavior.

Recent research has extended the exploration of NFT into digital and interactive environments, examining haptic interfaces such as laptops, tablets, and other peripheral devices (Ornati & Kalbaska, 2022). For example, studies indicate that women generally score higher on the NFT scale, reflecting a stronger tendency to seek tactile input for both pleasure and information (Cho & Workman, 2011). Closely related to NFT is Counter-Conformity Motivation (CCM)-the desire to deviate from societal norms and assert individuality. This motivation drives consumers to adopt unconventional, rare, or innovative products and styles as a means of gaining social distinction and expressing personal identity (Tian et al., 2001; Dlodlo, 2014). Within the realm of fashion, CCM manifests through a preference for unique and attention-grabbing clothing, including digital garments that stand out from mainstream offerings. This behavior often overlaps with NFT, as individuals with a high NFT are more likely to value concrete sensory engagement-even within digital fashion settings where physical touch is absent.

Several studies highlight the central role of touch in shaping online shopping behavior. For instance, Levin et al. (2003) found that consumer preferences for specific retail channels are influenced by their desire for tactile interaction. Similarly, Citrin et al. (2003) identified a negative correlation between the need for physical touch and the likelihood of making online purchases-particularly for high-touch items like clothing. This gap in sensory feedback often leads to reluctance or resistance in online apparel shopping (Peck & Childers, 2003).

As a response, consumers increasingly seek alternative sensory modalities in digital fashion environments (Atkinson et al., 2016), especially in contexts such as digital dressing, where physical engagement with materials is limited (Jang & Ha, 2023). This limitation presents a challenge for designers, who must find innovative ways to communicate tactile attributes through digital platforms (Jang & Ha, 2023). Technologies such as virtual dressing rooms have emerged to address this need, allowing consumers to visualize garment fit and style virtually while satisfying some of their tactile expectations (Sapio et al., 2018).

These developments not only meet sensory needs but also align with counter-conformity motives by offering distinctive and personalized fashion experiences. For instance, holographic projections in apparel retail enhance the visual realism of garments, offering a more immersive experience that appeals to individuals with high NFT (Yang & Hou, 2023). Consequently, individuals with a strong Need for Touch are also more likely to exhibit Counter-Conformity Motivation, seeking out unique and sensorially rich digital fashion experiences.

Hypothesis 1: There is a positive relationship between the Need for Touch (NFT) and Counter-Conformity Motivation (CCM).

Counter-Conformity Motivation and e-word of mouth

This study explores the relationship between Counter-Conformity Motivation (CCM)—the inclination to reject conventional norms and express individuality—and electronic Word-of-Mouth (eWOM) behaviors within the digital fashion landscape. Individuals with strong counter-conformist tendencies are often attracted to eccentric, avant-garde, or niche fashion styles (Nail, MacDonald, & Levy, 2000). Digital platforms such as Instagram and TikTok serve as ideal outlets for these preferences, offering spaces for unique self-expression and style experimentation.

In this context, eWOM refers to consumer-generated online content concerning specific products (Hennig-Thurau et al., 2004). It functions as a key mechanism through which nonconformists express their fashion identities and share opinions on unconventional styles. Empirical studies support a positive association between CCM and eWOM. For instance, Berger and Heath (2007) found that individuals driven by a desire for uniqueness are more inclined to communicate about products that reflect distinctiveness. Similarly, Cheema and Kaikati (2010) demonstrated that consumers with high counter-conformity motivations are more likely to engage in discussions about niche or anti-mainstream fashion. Moreover, social media algorithms appear to amplify this behavior by rewarding novelty, visibility, and individual expression (Kim & Sullivan, 2019). Lee and Eastin (2021) observed that eWOM emphasizing authenticity or rebellion tends to garner higher engagement, reinforcing the value of nonconformist content in digital spaces. However, findings are not universally positive. Arsel and Thompson (2011) argued that some counter-conformists deliberately avoid mainstream platforms to preserve their authenticity and resist commercialization, suggesting a negative or avoidance-based relationship with eWOM. Similarly, Amos et al. (2014) proposed that certain consumers engage in cautious or evaluative eWOM, using digital platforms to critique dominant trends rather than promote alternatives highlighting a more complex and context-dependent relationship. These conflicting perspectives underscore the nuanced nature of how CCM influences eWOM within the digital fashion context. Based on the theoretical and empirical evidence, the following hypothesis is proposed:

Hypothesis 2: There is a positive relationship between Counter-Conformity Motivation (CCM) and electronic Word-of-Mouth (eWOM) related to digital dress.

The mediating role played by Counter-Conformity Motivation

This study explores how the Need for Touch (NFT) and Counter-Conformity Motivation (CCM)—the drive to reject social norms and assert individuality—jointly influence the relationship between digital clothing adoption and electronic Word-of-Mouth (eWOM). In the fashion industry, eWOM plays a pivotal role in shaping consumer purchase intentions and enhancing product sales (Verma et al, 2021). Beyond fashion, eWOM also significantly contributes to decision-making in tourism and destination marketing (Zhou et al., 2019).

The rise of digital fashion brands such as Atacac and The Fabricant signals a shift toward revolutionary clothing options that promote self-expression and creative freedom (Sarmakari, 2021). By leveraging sensory perception in design, digital platforms can create unique, environmentally conscious garments that reduce resource use and eliminate the need for physical prototypes (Glogar et al., 2025). As Amatulli et al. (2021) suggest, the shift toward digital fashion fosters creativity and disrupts traditional industry norms. This innovation is particularly evident in the emergence of sustainable luxury goods that appeal to consumers seeking both uniqueness and environmental responsibility. Lang et al. (2016) highlight that the interplay between creative choice counter-conformity and sustainable practices can meaningfully influence consumer attitudes. Individuals with a tendency toward nonconformist, creative choices are more likely to support sustainable fashion, thereby promoting eco-friendly consumption. Additionally, broader socio-economic transformations—particularly in the wake of digital acceleration—have driven innovation across sectors, including fashion and luxury (Amankwah-Amoah et al., 2021; Verhoef et al., 2021). Consumers motivated by counter-conformity aim to stand out and assert their uniqueness.

Dlodlo (2014) emphasizes that this motivation arises from a desire to deviate from societal expectations and norms. In the context of fashion, such motivations often manifest through eWOM, where consumers communicate their distinctiveness via digital platforms. As noted by Erasmus et al. (2015), individual differences in consumer behavior—especially the pursuit of uniqueness—reflect a broader psychological need for identity differentiation. This may result in unconventional, bold, or intentionally dissimilar fashion choices (Chattalas & Harper, 2007). Barone and Jewell (2012) argue that this expression of individuality is a key driver behind counter-conformist behavior. In line with these theoretical insights, it is proposed that CCM may serve as a mediating factor between tactile preferences and the online advocacy of digital fashion, particularly through eWOM.

Hypothesis 3: Counter-Conformity Motivation mediates the positive relationship between the Need for Touch (NFT) and digital dress electronic Word-of-Mouth (eWOM)



Figure 2: Research Model. Source: (Author's own)

Methodology

Data Collection Procedure

This study adopts a post-positivist approach to investigate the hypothesized relationships. Accordingly, data will be collected in two distinct phases. The first phase will serve as a pilot study, targeting university students from Generation Z—individuals often recognized as digital natives and early adopters of emerging trends, including virtual fashion. This group is purposefully selected to refine measurement items and ensure the internal consistency and clarity of the survey instrument. In the second phase, data will be gathered from a broader and more demographically diverse sample using Amazon Mechanical Turk (MTurk). Participants will be screened using inclusion and exclusion criteria to confirm their familiarity with digital platforms, social media, or digital fashion environments. A nominal compensation will be provided to incentivize high-quality responses and enhance participation.

Sampling and Sample Size

For the pilot study, a maximum of 100–150 university students will be recruited through convenience sampling. In the main study, a target sample of at least 500 respondents will be obtained via Amazon Mechanical Turk (MTurk) to ensure adequate statistical power for both SmartPLS and fuzzy-set Qualitative Comparative Analysis (fsQCA), in line with established guidelines for Partial Least Squares Structural Equation Modelling (PLS-SEM). All constructs in the study will be measured using previously validated scales. Need for Touch (NFT) will be assessed using items developed by Peck and Childers (2003). Counter-Conformity Motivation (CCM) will be measured using adapted items from Tian et al. (2001). Electronic Word-of-Mouth (eWOM) intentions will be evaluated using the scale developed by Cheung and Thadani (2012). All survey items will be rated on a 5-point Likert scale, ranging from Strongly Disagree (1) to Strongly Agree (5).

Data Analysis Techniques

This study employs a two-step analytical approach using SmartPLS 4 and Fuzzy-set Qualitative Comparative Analysis (fsQCA) to provide both variance-based and configurational insights. Specifically, SmartPLS 4 will be used to conduct Partial Least Squares Structural Equation Modelling (PLS-SEM), a second-generation statistical technique well-suited for complex models involving latent constructs and mediating variables. PLS-SEM

is appropriate in this context due to the exploratory nature of the study and the inclusion of both formative and reflective indicators.

The PLS-SEM analysis will include:

Measurement model assessment – evaluating reliability (e.g., Cronbach's alpha, composite reliability) and validity (e.g., convergent and discriminant validity).

Structural model evaluation – assessing path coefficients, coefficient of determination (R^2), effect sizes (f^2), and mediation effects.

As a complementary method, fsQCA will be employed to uncover causal configurations that contribute to high levels of eWOM behavior. fsQCA is particularly valuable for identifying combinatorial pathways and addressing the principle of equifinality—where multiple configurations (e.g., varying levels or combinations of NFT and CCM) may lead to similar outcomes in eWOM behavior. Calibration procedures will follow the guidelines outlined by Ragin (2008), and fsQCA results will be compared with PLS-SEM findings for methodological triangulation. Finally, ethical approval for this study has been obtained from the Huddersfield Business School. Participation will be entirely voluntary and anonymous, ensuring adherence to ethical research standards.

Theoretical Contributions

This study offers significant theoretical contributions to the fields of digital consumption, fashion innovation, and consumer psychology. First, it extends the foundational theory of Need for Touch (NFT)—traditionally explored within the context of physical retail and product evaluation (Peck & Childers, 2003)—to the emerging realm of digital clothing. By examining how consumers with high NFT respond to intangible, virtual fashion products, the research challenges the prevailing assumption that such individuals inherently resist digital experiences. Instead, it posits a more nuanced pathway, wherein NFT can indirectly foster digital engagement when mediated by psychological factors such as Counter-Conformity Motivation (CCM).

Second, this study introduces CCM as a mediating variable, offering a novel conceptual framework. Although CCM has previously been associated with non-traditional product preferences and anti-mainstream consumption patterns (Tian et al., 2001), its role in bridging the tactile need and advocacy for digital fashion has remained largely unexplored. The findings suggest that high-NFT consumers may be more inclined to adopt and promote digital clothing when it aligns with their motivation to stand out. In this way, CCM repositions digital fashion adoption not as a reluctant compromise, but as an intentional act of self-differentiation contributing to broader discussions on identity construction and digital self-expression.

Finally, this study advances the theoretical understanding of electronic word-of-mouth (eWOM) within the context of digital fashion. While existing literature typically links eWOM to satisfaction or utility, this research highlights deeper psychological drivers—such as the desire to defy norms and express uniqueness—that influence consumers' willingness to advocate for digital products. By integrating NFT, CCM, and eWOM into a unified model, the study presents a multidimensional perspective on how intrinsic psychological needs shape consumer advocacy in digitally mediated environments.

Practical/Managerial Contributions

This study offers several valuable practical implications for digital fashion brands, virtual influencers, and metaverse platform developers. As the fashion industry rapidly shifts toward digital and virtual offerings, gaining a deeper understanding of the psychological traits influencing consumer behavior becomes increasingly critical. This research reveals that consumers with a high Need for Touch-5.0 typically viewed as a barrier to digital product acceptance—may still adopt digital fashion if it aligns with their desire for uniqueness and challenges mainstream trends.

Marketers can leverage these insights by positioning digital clothing not merely as a technological novelty but as a bold, eccentric choice that embodies anti-conformist values. Campaigns emphasizing exclusivity, limited editions, or collaborations with avant-garde digital designers are likely to resonate with individuals high in Counter-Conformity Motivation (CCM), transforming perceived product limitations (such as lack of physicality) into symbolic strengths.

Moreover, fostering electronic word-of-mouth (eWOM) within virtual fashion communities is crucial. Nonconformist consumers tend to be vocal and influential, making them ideal drivers of conversations and trendsetting. Brands can amplify their impact by providing platforms where these consumers can showcase their digital looks, create user-generated content, and participate in decentralized style movements. Features such as virtual try-ons, avatar personalization, and interactive fashion NFTs can further engage tactile-sensitive users by simulating rich sensory experiences.

Ultimately, this study suggests that the adoption of digital fashion is driven by more than technological innovation alone. It is deeply shaped by nuanced consumer psychology, offering brands the opportunity to transform resistance into resonance.

Conclusion

To conclude, this study suggests that while Need for Touch (NFT) typically predicts aversion to digital products, its impact on digital clothing adoption can be reframed when Counter-Conformity Motivation (CCM) serves as a mediator. Individuals with a high NFT may actively engage in electronic word-of-mouth (eWOM) to assert their uniqueness, promoting digital fashion not in spite of, but because of its unconventional nature. This research contributes to theory by elucidating how tactile preferences operate in virtual contexts and offers practical guidance for marketers to craft digital fashion experiences that resonate with nonconformist values and amplify consumer advocacy online.

References

- Allied Market Research. (2023). Digital fashion market size, share & trends analysis report by component, by application, by region, and segment forecasts, 2023–2031. <https://www.alliedmarketresearch.com>
- Baek, E., Choo, H. J., & Park, H. (2022). Exploring Gen Z's acceptance of digital fashion in virtual environments: The role of self-expression and technology readiness. *Fashion and Textiles*, 9, 31. <https://doi.org/10.1186/s40691-022-00290-1>
- Choi, Y., & Kim, M. J. (2021). Environmental and hedonic motivations for the adoption of virtual fashion: The mediating role of perceived value. *Fashion and Textiles*, 8, 37. <https://doi.org/10.1186/s40691-021-00254-7>
- Park, J., Kim, K. J., & Lee, J. Y. (2023). Understanding digital fashion adoption in metaverse environments: The impact of presence and avatar identification. *Journal of Business Research*, 160, 113732. <https://doi.org/10.1016/j.jbusres.2023.113732>
- Sheng, H. (2023). Digital apparel and the metaverse: Consumer behavior and brand strategy in virtual fashion markets. *Journal of Retailing and Consumer Services*, 71, 103158. <https://doi.org/10.1016/j.jretconser.2022.103158>
- Tian, K. T., Bearden, W. O., & Hunter, G. L. (2001). Consumers' need for uniqueness: Scale development and validation. *Journal of Consumer Research*, 28(1), 50–66. <https://doi.org/10.1086/321947>
- Zou, S., Lin, R., & Wang, Y. (2022). The rise of virtual fashion in China: User experience, perceived value, and behavioral intention. *Fashion Practice*, 14(2), 269–290. <https://doi.org/10.1080/17569370.2022.2045580>

- Amankwah-Amoah, J., Khan, Z., Wood, G., & Knight, G. (2021). COVID-19 and digitalization: The great acceleration. *Journal of Business Research*, 136, 602–611. <https://doi.org/10.1016/j.jbusres.2021.08.011>
- Amatulli, C., De Angelis, M., Peluso, A. M., Soscia, I., & Guido, G. (2021). The effect of luxury brand consumption on sustainable behavior: A social influence perspective. *Journal of Business Research*, 125, 364–372. <https://doi.org/10.1016/j.jbusres.2020.12.054>
- Amos, C., Holmes, G., & Strutton, D. (2014). Exploring the relationship between celebrity endorser effects and advertising effectiveness. *International Journal of Advertising*, 27(2), 209–234. <https://doi.org/10.2501/S0265048708080181>
- Atkinson, L., Piskorski, M., & Woodside, A. G. (2016). Touching the future: Haptic marketing in a digital world. *Journal of Consumer Behaviour*, 15(5), 437–445. <https://doi.org/10.1002/cb.1589>
- Barone, M. J., & Jewell, R. D. (2012). The innovator's license: A latitude to deviate from category norms. *Journal of Marketing*, 76(1), 120–134. <https://doi.org/10.1509/jm.10.0400>
- Berger, J., & Heath, C. (2007). Where consumers diverge from others: Identity signaling and product domains. *Journal of Consumer Research*, 34(2), 121–134. <https://doi.org/10.1086/519142>
- Chattalas, M., & Harper, H. (2007). Identifying personality traits associated with preference for fashion counterfeits. *Advances in Consumer Research*, 34, 687–693.
- Cheema, A., & Kaikati, A. M. (2010). The effect of need for uniqueness on word of mouth. *Journal of Marketing Research*, 47(3), 553–563. <https://doi.org/10.1509/jmkr.47.3.553>
- Cheung, C. M., & Thadani, D. R. (2012). The impact of electronic word-of-mouth communication: A literature analysis and integrative model. *Decision Support Systems*, 54(1), 461–470. <https://doi.org/10.1016/j.dss.2012.06.008>
- Cho, S., & Workman, J. E. (2011). Gender, fashion innovativeness and need for touch: Effects on multi-channel choice and touch/non-touch channel preference in clothing shopping. *International Journal of Consumer Studies*, 35(6), 610–618. <https://doi.org/10.1111/j.1470-6431.2011.01029.x>
- Citrin, A. V., Stem, D. E., Spangenberg, E. R., & Clark, M. J. (2003). Consumer need for tactile input: An Internet retailing challenge. *Journal of Business Research*, 56(11), 915–922. [https://doi.org/10.1016/S0148-2963\(01\)00278-8](https://doi.org/10.1016/S0148-2963(01)00278-8)
- Dlodlo, N. (2014). Modeling the influence of the need for uniqueness on Generation Y consumers' intention to purchase customized fashion products. *Mediterranean Journal of Social Sciences*, 5(21), 9–18. <https://doi.org/10.5901/mjss.2014.v5n21p9>
- Erasmus, A. C., Boshoff, E., & Rousseau, G. G. (2015). The influence of the need for uniqueness on Generation Y students' fashion brand preferences. *Journal of Fashion Marketing and Management*, 19(3), 262–278. <https://doi.org/10.1108/JFMM-02-2014-0013>
- Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing*, 18(1), 38–52. <https://doi.org/10.1002/dir.10073>
- Hirschmiller, S. (2022, November 21). This new digital fashion platform lets creators convert designs into augmented reality. *Forbes*.
- Jang, J., & Ha, S. (2023). Tactile imagination in virtual clothing consumption: Exploring consumers' engagement with digital fashion. *Fashion and Textiles*, 10, 12. <https://doi.org/10.1186/s40691-023-00315-9>

- Kim, J., & Sullivan, P. (2019). Motivations for and implications of social media fashion sharing: An exploratory study of fashion opinion leaders. *International Journal of Fashion Design, Technology and Education*, 12(3), 310–318. <https://doi.org/10.1080/17543266.2019.1610592>
- Lang, C., Zhao, R., & Swinney, J. (2016). Understanding consumer sustainability preferences through conjoint analysis. *Journal of Fashion Marketing and Management*, 20(4), 471–486. <https://doi.org/10.1108/JFMM-11-2015-0091>
- Lee, J. E., & Eastin, M. S. (2021). I like what she's #wearing: Influencer credibility, personal relevance, and the perceived authenticity of social media fashion posts. *Journal of Interactive Marketing*, 55, 9–21. <https://doi.org/10.1016/j.intmar.2021.01.002>
- Levin, A. M., Levin, I. P., & Weller, J. A. (2003). A multi-attribute analysis of preferences for online and offline shopping: Differences across products, consumers, and shopping stages. *Journal of Electronic Commerce Research*, 4(4), 114–120.
- Nike. (2021). NIKE, Inc. acquires RTFKT. <https://news.nike.com/news/nike-acquires-rtfkt>
- Ornati, E., & Kalbaska, N. (2022). Touchless but tangible: Haptic interfaces and digital fashion experiences. *Fashion Theory*. <https://doi.org/10.1080/1362704X.2022.2093012>
- Peck, J., & Childers, T. L. (2003). To have and to hold: The influence of haptic information on product judgments. *Journal of Marketing*, 67(2), 35–48. <https://doi.org/10.1509/jmkg.67.2.35.18612>
- Ragin, C. C. (2008). *Redesigning social inquiry: Fuzzy sets and beyond*. University of Chicago Press.
- Sapio, B., Castelli, L., De Cindio, F., & Gatti, M. (2018). Virtual fitting rooms: Bridging physical and digital fashion shopping. *Fashion Practice*, 10(1), 95–110. <https://doi.org/10.1080/17569370.2018.1441184>
- Särmäkari, N. (2021). Digital fashion on its way from niche to the new norm. In T. Ryyänen, E. M. Hänninen, & P. Kalliomäki (Eds.), *Virtual style: Digital fashion culture* (pp. 15–33). Intellect Books. https://doi.org/10.1386/9781789384372_2
- Tian, K. T., Bearden, W. O., & Hunter, G. L. (2001). Consumers' need for uniqueness: Scale development and validation. *Journal of Consumer Research*, 28(1), 50–66. <https://doi.org/10.1086/321947>
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Qi Dong, J., Fabian, N., & Haenlein, M. (2021). Digital transformation and innovation: A research agenda. *Journal of Business Research*, 122, 889–901. <https://doi.org/10.1016/j.jbusres.2020.06.007>
- Vogue Singapore. (2021, August 17). Cyber couture: 8 digital fashion houses to shop for virtual clothing now. Vogue Singapore.
- Vuruskan, A., & Ashdown, S. P. (2017). Developing virtual avatars for clothing design using 3D body scanning. *Journal of Textile Engineering*, 63(2), 54–62. <https://doi.org/10.4181/jte.2017.63.2.054>
- Yang, Y., & Hou, L. (2023). Research on the application of holographic projection technology in apparel display. In *Proceedings of SPIE Vol. 12609: Wearable and Flexible Display Technology 2023 (Paper 126091S)*. <https://doi.org/10.1117/12.2671945>
- Zhou, Y., Wang, X., & Zhao, X. (2019). The impact of eWOM on tourist decision-making: A meta-analysis. *Tourism Management Perspectives*, 31, 23–30. <https://doi.org/10.1016/j.tmp.2019.03.003>
- Arsel, Z., & Thompson, C. J. (2011). Demythologizing consumption practices: How consumers protect their fielddependent identity investments from devaluing marketplace myths. *Journal of Consumer Research*, 37(5), 791–806. <https://doi.org/10.1086/656389>

- Nail, P. R., MacDonald, G., & Levy, D. A. (2000). Proposal of a four-dimensional model of social response. *Psychological Bulletin*, 126(3), 454–470. <https://doi.org/10.1037/0033-2909.126.3.454>
- Verma, S., Sharma, H., Deb, M., & Maitra, D. (2021). Past, present, and future of electronic word of mouth (eWOM). *Journal of Interactive Marketing*, 53, 111–128. <https://doi.org/10.1016/j.intmar.2020.07.001>
- Chan, H. H. Y. (2024). The adoption of digital fashion as an end product. *Journal of Fashion Business & Technology*. <https://doi.org/10.1080/20932685.2023.2251033>
- Rosato, L., & Calleo, A. (2023, November 20). Digital Fashion Technologies & Practices: Design Driven Sustainable Transition in Fashion Industry. <https://doi.org/10.30682/diiddsi23t1n>
- Glogar, M., Petrak, S., & Mahnić Naglič, M. (2025). Digital technologies in the sustainable design and development of textiles and clothing, a literature review. *Sustainability*, 17(4), 1371. <https://doi.org/10.3390/su17041371>

Full Paper

Breaking or Reinforcing the Mold? Consumer Backlash in Gender Role Advertising

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The study aims to learn how gendered ads affect consumers' purchase intention and word-of-mouth behavior through emotional engagement and perceived authenticity. Conducting an experimental study with 177 individuals from the USA, we found that participants prefer gendered ads vs non-gendered ads. Moreover, we found that ads that show challenging gender roles, such as men in a domestic role or women in a leadership role, tend to get negative views. This is an unexpected finding because in the world of heightened promises of gender equality, we are still opposing the idea that men cannot get involved in domestic activities. This study contributes to the theory by again proving gender schema theory and extending the dual processing theory. Our study also has managerial contributions as we recommend some dos and don'ts for them.

Keywords: Gendered ad, purchase intention, positive word of mouth, negative word of mouth, non-gendered ad, emotional engagement, perceived authenticity, self-image congruency.

Introduction:

"Doing business without advertising is like winking at a girl in the dark. You know what you are doing, but nobody else does."— Stuart Henderson Britt

One of the most powerful marketing strategies available is advertising; if done right, it can attract businesses their desired attention from their target market. The 2024 advertising agency research shows that 71% of managers feel their work was simpler a few years ago than it is now (Larrison, 2024). Therefore, it is incomprehensible to overestimate the value of good advertising in reaching the target consumer (Luo & Ranjan, 2025). From styles to languages, how information is presented in ads strongly influences customer attitudes and behavior (Liu et al., 2022). Supported by several theories or frameworks, like the elaboration likelihood model and heuristic processing theories, effective advertising fosters a strong link between brand messaging and purchasing behavior (Shuqair et al., 2024). Broadly, there are two types of advertising: one is functional and the other is emotional. Both have their styles and effectiveness in the advertising world.

Using analytical, intentional processing (Zhang et al., 2024), researchers have carefully investigated how functional advertising, which emphasizes product features, technical specifications, and utilitarian benefits, drives customer judgements. Emotional advertising, on the other hand, takes advantage of visual clues, emotive appeals, and narrative devices that set consumers in affective reactions (Delgado-Ballester & Sabote, 2015). This division of the current literature has resulted in a lack of knowledge of how consumers evaluate advertising messages in practical settings. Advertisements typically include emotional and functional signals simultaneously, but the interaction between these elements is seldom studied. In service advertising, for example, the difference between rational and emotional appeals has been investigated, with an emphasis mostly on the direct results of these appeals rather than on their combined influence (Zhang et al., 2014). This divergence exposes a key gap that requires investigating if and how the combination of emotional and functional elements might produce results more than the total of separate influences.

According to the elaboration likelihood model (ELM) and dual-route processing theories, consumers combine logical and emotive information rather than accurately separating it when developing attitudes and final behavioral intentions (Delgado-Ballester & Sabote, 2015). In a world when consumers are inundated with information, an ad that meets both the want for informative content and emotional needs may be very successful in capturing attention and enabling decision making, and it calls for the creativity of the marketers (Rosengren et al., 2020). Although creativity typically results in a careful mix of cognitive and emotive components, the exact circumstances under which this balance translates to higher purchase intentions are still less well-known (Rosengren

et al., 2020). Companies that can achieve this strategic balance might be more suited to stand out in crowded media settings.

Examining the combination of emotional and functional attractions also has implications for improving marketing theoretical models. Current models, such as the dual-process theories, must be expanded to include the dynamics of integrated messaging that concurrently engages system 1 (rapid, simple, emotional processing) and system 2 (slow and deliberate analytical processing) (Zhang et al., 2014). This expansion would allow more complete models reflecting the realities of contemporary advertising to be developed. Furthermore, by investigating the relationship between these two information sources, researchers might find yet undetectable mediators or moderators which help to clarify how advertising can influence purchasing choices. Identifying the gaps regarding this in the literature, in this study, we combined functional and emotional cues in ads and examined their effect on consumer behavior. To do so, we added gender roles (traditional vs challenging) as emotional cues in functional or utilitarian product types. From this research, we tried to answer questions: which ad is more effective: gendered vs non-gendered? We also explored which type of gendered ad (traditional vs challenging gender roles) is more preferable?

After conducting the study with 177 respondents hired from prolific, we found that gendered ads were more emotionally engaging, which increases purchase intention and positive word of mouth. Additionally, we discovered that people are likely to spread negative words about ads that challenge traditional gender roles. This shows that the Gender Schema Theory (Bem, 1981) It is still prevalent in society, and people still have gender stereotypes where they are not comfortable seeing men in domestic roles. Our research suggests that marketers need to be careful while crafting their ads, as ads representing gender roles can produce a negative impact on consumers. Also, we recommend that marketers do extensive pre-ad research to study their target consumers, as consumers' preferences should be given top priority while designing ad content.

This study offers several theoretical contributions to the fields of consumer behavior and advertising psychology. First, it extends Gender Schema Theory (Bem, 1981) by demonstrating its continued relevance in contemporary marketing contexts. Despite evolving societal attitudes toward gender, our findings reveal that traditional gender schemas remain deeply embedded in consumers' cognitive frameworks. These internalized beliefs influence how individuals interpret advertising content, especially when it deviates from conventional gender roles. The discomfort or dissonance experienced in response to non-traditional portrayals—such as men depicted in domestic roles—underscores the enduring power of these schemas in shaping emotional and behavioral responses. Second, the study identifies emotional engagement as a key mediating factor between gendered advertising and consumer outcomes. This insight bridges gaps in the literature by linking gender role congruity with affective reactions and downstream behavioral intentions, such as purchase intention and word-of-mouth. The findings align with schema congruity theory, showing that emotionally engaging ads—particularly those consistent with existing gender norms—are more persuasive and positively received. Conversely, schema-incongruent ads can provoke negative emotions and lead to negative word-of-mouth, highlighting the defensive reactions that arise when deeply held norms are challenged. Lastly, our research contributes to understanding the emotional dynamics underlying consumer resistance to social messaging. It suggests that when ads violate entrenched gender norms, they may trigger not only rejection but also active sharing with negative commentary. This extends existing models of consumer backlash by emphasizing the emotional discomfort as a key driver of defensive communication behaviors, particularly in the digital era where sharing and commenting are integral parts of consumer expression.

From a practical standpoint, the study provides actionable insights for marketers, advertisers, and brand strategists. One key implication is that gendered ad content must be carefully aligned with the target audience's values and expectations. While there is a growing push for more inclusive and progressive portrayals in the media, such representations may not yield positive consumer responses if audiences are not psychologically ready to accept them. Marketers should adopt a nuanced approach by using audience segmentation and psychographic profiling to assess receptiveness before deploying gender-progressive messaging. The research also highlights the need for rigorous pre-ad testing, particularly for content that challenges traditional norms. By using focus groups, A/B testing, or sentiment analysis tools, marketers can better predict emotional responses and avoid negative brand associations. Emotional reactions, whether positive or negative, play a critical role in the effectiveness of advertisements, making early feedback essential to refine message framing and tone. Furthermore, the study emphasizes the importance of balancing inclusivity with market acceptance. Brands committed to social progress must consider the pace at which they introduce non-traditional representations. Gradual shifts, supported by

storytelling and relatable framing, may help audiences acclimate to new norms without triggering backlash. Finally, by leveraging tools such as humor, narrative structure, or aspirational messaging, marketers can better manage consumer discomfort and foster more positive engagement with socially progressive content.

Literature review:

To conceptualize our model with the theoretical framework and past works of literature, we have justified how each proposed variable aligns with our model. In doing so, we ensure proper justifications for why we considered the mediators, moderators or dependent variables. The extensive literature review also helped us to develop our hypotheses for this study.

Through several pathways, stressing either cognitive information processing or affective emotional reactions, consumers interact with advertising cues (Lee & O'Connor, 2003). These two processing paths are conceptualized in advertising research as separate but related systems, where the functional or rational route emphasizes objective product attributes and the emotional or affective path emphasizes feelings, moods, or affective images (Akbari, 2015). Early studies on advertising made it abundantly evident how different value-expressive (emotional) and utilitarian (functional) advertising are (Johar & Sirgy, 1991). While utilitarian appeals concentrate on the analytical evaluation of product advantages (Choi et al., 2012) Value-expressive appeals stimulate emotions and symbolic connections that resonate on a human level. Later research built on this dichotomy, showing how individual variances, including customer participation, product complexity, and even cultural characteristics, affect the relative efficacy of these several strategies (Johar & Sirgy, 1991).

By operationalizing functional advertising as conveying logical, fact-based information regarding product characteristics and utilitarian advantages, marketing academics have distanced it from its emotive counterpart (Zarantonello et al., 2013). Presenting verifiable product qualities, technical information, and logical arguments appealing to the consumer's analytical powers, functional ads are meant to set off systematic processing (Duffy, 2001). The main justification for functional appeals is that they fit high-involvement situations when customers are mindful of product performance and dependability substantially (Bizuayehu, 2020). Moreover, thorough product demonstrations and comparable claims included in functional commercials help to encode memories about product quality and attributes, which are vital for logical decision making (MacInnis & Jaworski, 1989). Our additional research found that the processing of functional ads depends on situational elements and demographic background (Geuens et al., 2011). Younger customers and those in low-involvement product categories often process emotional material more thoroughly and with more persuasion than their counterparts in high-involvement settings (Holmes & Crocker, 1987). On customer segments whose purchase decisions are mostly based on product usefulness and rational evaluation, functional advertising has better resonance (Chang et al., 2016).

On the contrary, the primary idea behind emotional advertising is that it may make people feel something, which in turn increases their propensity to buy and remember the advertised products (Shukla, 2023; Siani et al., 2021; J. Wang et al., 2021; Yaseen et al., 2022). Researchers attest to the fact that consumers are more inclined to remember and ultimately select the brand associated with emotional appeals, such as nostalgia, humor, and empathy. According to research, advertising relies more on emotional appeals than on functional messages, which are based on rational arguments and the advantages of the product, because the majority of people remember ads that make them feel good or tell an emotional story rather than ads that only list the benefits of the product (Achmad et al., 2022; Kuang et al., 2024).

Nonetheless, appeals for both emotional and functional advertising have restrictions (Matthes et al., 2014). While functional ads are successful but may not grab the interest of customers who are less driven or under cognitive overload, when thorough knowledge is essential for decision making (Viswanathan et al., 2005). On the other hand, emotional appeals shine in attracting attention and eliciting quick answers, but could be less successful in presenting complicated product information when needed (Taute et al., 2011). Thus, a segment-specific strategy to advertising emphasizes the requirement of a dual commercialization model that efficiently uses cognitive and emotional processing paths (Geuens et al., 2011). Combining cognitive information models with affect-based theories has produced a more complete knowledge of consumer reaction to advertising stimuli, therefore demonstrating a synergistic character of these processes (Soti, 2022). When both emotional components and logical reasons coexist, they might balance each other to improve general advertisement persuasion (Miceli et al., 2006). Consumers may first create affective impressions through emotional appeals while making difficult selections; these impressions will then be reinforced by the cognitive assessments of product information (Yeung & Wyer, 2004).

Such interactive effects underline the importance of creating advertising campaigns that include functional and emotional elements, as they serve different customer requirements and cognitive states (Mizerski & Dennis White, 1986).

When commercials effectively included cognitive and emotive aspects, this integrated approach demonstrated improved memory, positive attitudes, and higher purchase intentions (J. S. Johar & Sirgy, 1991; Soti, 2022). Rather than viewing these appeals as mutually exclusive, it is more productive to integrate them within a single communication strategy (Soti, 2022). For instance, an advertisement could begin with a strong emotional hook that grabs initial attention, followed by detailed functional information that satisfies consumer rationality (Soti, 2022). Developing integrative models incorporating emotional and functional elements becomes even more apparent as advertising research matures (Akbari, 2015; Soti, 2022). From a managerial perspective, insights from dual process theories have significant implications for designing effective advertising campaigns (Akbari, 2015). Ultimately, applying dual process theories to real-world advertising strategy enhances persuasive efficacy and contributes to more effective resourcefulness in marketing communications (Akbari, 2015; Rahmah & Setiawan, 2023).

The secret to producing emotionally exciting advertising is the vast range of sensory signals used in emotional commercials to arouse powerful emotions in viewers (Paharia et al., 2011). The effective ways to engage consumers emotionally through an advertisement are by applying evocative music (Liu et al., 2022), compelling storytelling (Paharia et al., 2011), visual aesthetics (Mars et al., 2022), humor and warmth, relatable character and authentic language (Teichert et al., 2018). In this study, the visual portrayal of gender roles in ads will be the primary focus, as we also want to study gender stereotypes behaviors among consumers. Our research will show that commercials, whether they stick to or challenge standard depictions of gender roles, have the power to connect viewers and impact their intention to buy.

While designing gendered ads, we found that either they portray traditional gender roles or challenge traditional gender roles (Lafky et al., 1996; Stevens & Ostberg, 2020). In traditional gender roles, women are shown in domestic or submissive scenarios (Shapoval, 2023) or in the fashion or beauty sectors (Rozas et al., 2021) whereas men are shown in power or an authoritative position (Aruna & Gunasundari, 2022). These gender stereotyping ads are popular in many cultures where people tend to be rigid and unchanging, and who value stability and cultural continuity. Customers who identify with the brand's traditional ideas may feel more emotionally invested in it after seeing these depictions, which can lead to greater sales. According to early studies, the cognitive processing of advertisements can be made easier by aligning them with pre-existing gender schemas. However, the effectiveness of this strategy in terms of retention and persuasion is still up for debate (Orth & Holancova, 2004; Royo-Vela et al., 2007). These cues activate stereotypic constructs, which in turn lead to overly generalized evaluations and potentially rigid behavior patterns (Johar et al., 2003). On the other hand, certain consumer segments can experience psychological reactance when traditional gender differentiation is overtly used in advertising (Caruelle, 2024). Furthermore, these conventional representations could alienate or incite negative responses among customers who see these stereotypes as out of current or constrictive (Hess & Melnyk, 2016). Therefore, even if conventional representations could increase purchase intention among some groups, they need to be carefully changed to prevent causing negative emotional reactions in a wide customer base.

On the contrary, commercials that challenge conventional gender norms point to more progressive and egalitarian stories that appeal to current ideals and many consumer identities. By highlighting non-stereotypical positions, companies may challenge conventional gender norms and build stories stressing empowerment, diversity, and inclusion (Plakoyiannaki & Zotos, 2009; Riska & Heikell, 2007; Sterbenk et al., 2021). Sometimes breaking conventional gender stereotypes in advertising yields more favorable consumer assessments and stronger degrees of buy intention (Kathpalia, 2019). While in certain areas following established gender roles can provide successful advertising results, in other environments a divergence from these standards improves brand trust and purchase likelihood (Zawisza & Cinnirella, 2010). Furthermore, negatively influencing consumers' purchasing behavior are insecure representations of women, often a natural result of conventional gender stereotypes (Nawaz & Zahra, 2024). This calculated retreat from convention is especially successful in the modern market, when many customers are open to ideas challenging accepted gender roles. Hence, we hypothesize that,

H1: Different ad types will produce significantly different levels of
H1a: purchase intention,

H1b: positive word of mouth,

H1c: negative word of mouth.

H2: Advertisements challenging traditional gender roles will result in

H2a: higher purchase intentions and

H2b: positive word of mouth, but

H2c: lower negative word of mouth

than ads that follow traditional gender roles among consumers.

Emotional Engagement:

Emotional engagement is the level of affective arousal and level of participation that consumers feel when they are exposed to stimuli from advertisements (Yan et al., 2024). Ads that aim to make people feel, whether it is through humor, pride, wonder, or narrative storytelling, are more likely to impact their desire to buy the product because they trigger positive cognitive heuristics (Otamendi & Martin, 2020). Therefore, it is believed that ads with more intense emotional signals increase the probability of a purchase through the mediation of emotional involvement (Afendi, 2023). Emotional involvement is a critical link in evaluating the relationship between ad style and intention to buy (Garg et al., 2023). Creative storytelling and powerful visuals in ads can enhance purchase intention by evoking heightened emotional arousal (Kang et al., 2020). Cognitive fluency resulting from emotive engagement lends credence to this transformational process; for example, researchers found that people's opinions towards brands were positively affected by emotionally engaging ads (J. Lee & Hong, 2016). Emotional investment also improves processing speed and memory, which in turn increases the likelihood that a buyer will make a purchase (Kim & Lennon, 2013).

Many theoretical models help us to understand how emotional involvement moderates the impact of ad style on purchase intentions. One such theory is the elaboration likelihood model (ELM). Emotionally charged ads, according to the ELM, cause a peripheral pathway of persuasion whereby the emotive experience produced by the advertising, instead of systematic thinking, finally influences customer purchase decisions (Sattorov, 2024). From internet video ads to classic television commercials, these results are constant across several settings and highlight the need of emotions as the intermediary between ad form and behavioral effect (Afendi, 2023). By doing this, emotional involvement becomes positioned as a dynamic modulator of customer behavior in response to different advertising approaches. From the findings, we hypothesize that,

H3: Emotional engagement after seeing an ad will mediate the relationship between different advertisement types (gendered vs non gendered) and

H3a: purchase intention and

H3b: positive word of mouth

H3c: negative word of mouth

Perceived Authenticity:

Authenticity has been theorized as an interpretive lens in recent studies through which consumers assess advertisements' integrity and congruence (Guo & Zhu, 2023; Papadopoulou et al., 2024). When consumers identify an advertisement as authentic, they are more likely to respond positively by developing favorable purchase intentions (Roy et al., 2017). This interaction between perceived authenticity and advertising type underlines the importance of a multidimensional understanding of authenticity in advertising research (Guo & Zhu, 2023; Papadopoulou et al., 2024). As we discussed earlier functional advertisements typically include product performance, technical specifications, and practicality (Chieh Lu et al., 2015; B. Wang & Li, 2022), thus the authenticity of functional cues depend on the accuracy, consistency, and factual nature (Chieh Lu et al., 2015; B. Wang & Li, 2022). In contrast, emotional advertisements use storytelling, aesthetics, and affective cues that emphasize values and experiences (Ellitan, 2021; Fatemi et al., 2023) where the authenticity is derived from the these emotional cues are congruent with the brand's identity and promises (Papadopoulou et al., 2024; Roy et al., 2017). So there is a mediation where consumers examine the credibility of emotional messages by comparing them with their expectations for originality and genuineness (Guo & Zhu, 2023; Papadopoulou et al., 2024).

Various dimensions make up authenticity, including originality, congruence, sincerity, connectedness, proficiency, and heritage. These dimensions are considered to mediate the effects of advertising on purchase

intention (Guo & Zhu, 2023; Morhart et al., 2015; Nunes et al., 2021). As an example, research on intangible cultural heritage souvenirs has demonstrated that authenticity acts as a mediator between image congruity and purchase intention. This happens because authenticity highlights the product's unique cultural worth (Kolar & Zabkar, 2010). This complex concept permits the unravelling of the experience layers common in emotional advertising from the instrumental aspects conveyed in functional ones (Papadopoulou et al., 2024). Researchers suggested that looking at authenticity from multiple angles can help us understand how consumers judge advertisements, both from a logical and a more emotional perspective (Ellitan, 2021; Fatemi et al., 2023). When people go through both the direct messages and the underlying signals in an ad, they tend to rely on their perception of authenticity to make purchase decisions (Guo & Zhu, 2023; Nunes et al., 2021). Especially in functional advertising, where the aim is to be transparent and clear, delivering clear and truthful messages matters. Researchers like Chieh Lu et al. (2015) and Wang & Li (2022) emphasized that the credibility and internal consistency of both the message and its delivery often signal how authentic an ad feels. Other scholars also pointed out that consumers appreciate ads that are open and detailed when explaining products (Nunes et al., 2021). This kind of communication reduces the sense of uncertainty and perceived risk, which helps build trust in the brand (Roy et al., 2017; Wang & Li, 2022). So, as Morhart et al. (2015) and Roy et al. (2017) noted, authenticity seems to work as a bridge between how trustworthy a brand feels emotionally and how reliable it appears based on its actual features.

When a functional ad comes off as authentic, it works better because it matches up the facts with what consumers expect from a brand that's being honest and straightforward (Lu et al., 2015; Wang & Li, 2022). On the flip side, emotional advertising is more about making people feel connection, nostalgia, or even ambition, and the success of that depends a lot on how genuinely those emotions are delivered (Ellitan, 2021; Fatemi et al., 2023). If the emotional cues in an ad line up with people's personal values or past experiences, it feels more authentic to them and makes the ad more convincing (Beverland & Farrelly, 2010). When viewers sense that the emotion in a message is real, not fake or overly polished, they tend to relate to it more, which then builds a stronger bond with the brand and increases the chance they'll buy something (Padgett & Allen, 1997). Here, perceived authenticity kind of acts like a filter because it helps people decide whether the emotional part of the ad is something they trust or just another marketing trick (Fatemi et al., 2023). That real emotional pull doesn't just make the ad feel nice, it also builds a solid attitude toward the brand and closes that gap between just liking an ad and wanting to buy the product (Young et al., 2019). When you blend facts with emotional storytelling, it creates a fuller, more believable brand message that works well for today's consumers (Aaker, 2018). What makes this work is when the emotional side and the rational side do not fight each other. Instead, they support each other and send a consistent message, that's where authenticity kicks in (Papadopoulou et al., 2024; Roy et al., 2017). So, when brands manage to pull off this mix well, they usually see more trust and engagement from customers, and a lot of that is driven by how authentic the ad feels (Blank et al., 2023). All in all, marketers should focus on crafting ads that give good, solid information but also tell a story people can feel, that's what helps build a stronger connection between the brand and the customer (Papadatos, 2006).

To sum it up, authenticity, being a mix of factual honesty, accuracy, and brand promise alignment, plays a key role in how people turn ad messages into real actions. When functional ads come across as authentic, they help build trust and cut down on uncertainty, and when emotional appeals feel genuine, they create a deeper bond between the brand and the consumer (Ellitan, 2021; Fatemi et al., 2023). But when these two approaches are brought together in a balanced way, perceived authenticity strengthens the overall message and boosts the intention to buy because it connects with both the logical and emotional sides of the audience (Blank et al., 2023; Kim & Song, 2020). So, based on all that, we hypothesize:

H4: Perceived authenticity of an advertisement mediates the relationship with

H4a: purchase intention and

H4b: positive word of mouth

H4c: negative word of mouth

Self-image congruency:

Self-image congruency means how much a person's self-view, both who they are and who they'd like to be, matches up with what they see in an ad (Hosany & Martin, 2012). In gendered advertising, this is more about whether the gender roles shown in the ad align with how someone personally sees or accepts those roles. When an ad reflects or affirms someone's self-image, it can create a strong sense of self-validation, which plays a big role in

how authentic the message feels (Yao et al., 2025). If the way gender is portrayed in the ad feels familiar or aligns with a consumer's own beliefs, the message tends to come across as more trustworthy and believable. That kind of match helps reinforce what the consumer already believes in, which boosts how real the ad feels to them. But if the gender cues feel off or don't match the viewer's self-concept, the ad can end up feeling fake or forced (Ndasi & Akcay, 2020). Also, when ads reflect who we are or who we would like to be, they tend to feel more real and relatable (Bishop, 2000). These kinds of ads go beyond just trying to sell something. Instead, they feel more like a mirror that helps people reflect on themselves. That connection helps build trust in the message and often improves how people feel about the brand, too. In this way, authenticity becomes a key factor in shaping consumer responses. Self-image congruency plays a big role here because it acts like a filter; if the message aligns with someone's sense of self, especially in terms of gender roles, it just feels more believable and genuine (Bishop, 2000; Ndasi & Akcay, 2020; Yao et al., 2025).

When it comes to emotional connection, this match between the ad and the consumer's self-image makes a real difference. If people see parts of themselves in an ad, it tends to hit differently; it sparks a stronger emotional reaction than something that just looks nice on the surface. That personal alignment pulls the viewer in and makes them more likely to really pay attention. They feel like the ad gets them, and that feeling leads to deeper emotional involvement. So when there's high self-image congruency, consumers are likely to engage with the ad on a more intense and positive emotional level (Yoon & Kim, 2015).

On top of that, when viewers see an ad that feels like a reflection of who they are or who they want to become, they tend to react more emotionally, feeling things like joy, nostalgia or even inspiration. These emotions are key to creating that deeper emotional connection, which shows just how important self-image congruency is in shaping how people emotionally respond to ads (Lee et al., 2017). Studies have shown a clear link between how much someone relates to the ad and the kind of emotional response it triggers. When the storyline or message in the ad lines up with how viewers see themselves, it makes the whole thing feel more personal and meaningful. That's when the ad starts to resonate emotionally (Saxena et al., 2023). In one study, this alignment did not just make people feel more satisfied, it also sparked stronger positive emotions toward the brand's message. So, all this suggests that when there's a good match between an ad's narrative and the consumer's self-image, it leads to a deeper emotional reaction and more meaningful engagement with the ad overall (Yoon & Kim, 2015). Therefore, we hypothesize,

H5: Self-image congruency moderates the relationship between advertisement types (gendered vs non-gendered) and perceived authenticity

H6: Self-image congruency moderates the relationship between advertisement type (gendered vs non-gendered) and Emotional engagement

Purchase Intention and Word of Mouth Behavior:

Researchers employed purchase intention and word of mouth behaviors as dependent variables in most of the consumer behavior studies. Purchase intention captures consumers' attitudes, beliefs, and emotional responses toward a brand or product (Kim & Kim, 2004; Nowlis et al., 2002). It is considered a good proxy for actual behavior because real purchase decisions are often shaped by external constraints that are hard to measure. So, instead of relying on actual purchase data, researchers often measure purchase intention to understand the motivation that drives consumer behavior (Chandon et al., 2005). It also helps researchers test theoretical models and understand how exposure to ads translates into consumer action. Many studies have validated both single-item and multi-item scales of purchase intention, and these measures have been used across various product categories and consumer groups (Cheah et al., 2018). That is why it is a widely accepted construct in both academic and applied marketing research.

In experimental settings, purchase intention is particularly useful because it allows researchers to manipulate ad-related variables and see how participants respond in terms of their buying intentions (Khan et al., 2022). It is also considered a reliable measure, as studies have found that it correlates well with actual consumption behavior (Schlosser & Shavitt, 2009). So, using it gives us a good idea about how effective an ad or campaign is in influencing consumer behavior. From a managerial perspective, measuring purchase intention can provide insights that are useful for designing ad messages and media plans. It helps marketers see what kind of appeals work better and how they influence consumer intention to buy (Kim & Kim, 2004). It also helps in segmentation because by

analyzing the variation in intentions, marketers can design better strategies for different consumer groups (Nowlis et al., 2002). Overall, its strong theoretical foundation and empirical validation make it a useful tool for both researchers and practitioners. For these reasons, this study used purchase intention as the dependent variable to measure advertising effectiveness.

Additionally, word-of-mouth behavior helps to predict advertising effectiveness as it is correlated with brand perception (Feng & Papatla, 2011). Word of mouth can be both positive and negative. Positive word of mouth has the power to increase consumer loyalty (Iqbal & Siddiqui, 2019) and can even create purchase intention. Researchers also found a strong correlation between positive word of mouth and brand image (Demir et al., 2024). The electronic word of mouth (EWOM) can also significantly create and increase consumer purchase intention (Kamalasena & Sirisena, 2021). On the contrary, negative word of mouth can decrease the advertising effectiveness and brand image (Villanueva et al., 2019). Also, negative word of mouth has a detrimental effect, which is sometimes hard for the advertisers to attenuate (Shokurloo et al., 2020). Hence, in this study, I have also considered word-of-mouth behavior to see how consumers perceive different ads based on gender roles.

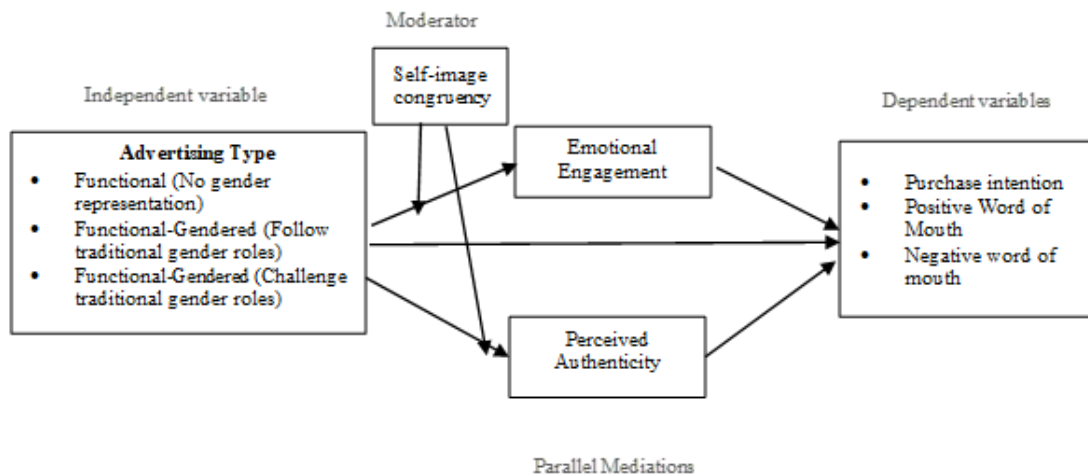


Figure 1: Conceptual Framework

Based on the reviewed literature, we identified the mediating and moderating variables alongside our study's dependent variable, resulting in our conceptual model (Figure 1).

Methodology

This study employs a quantitative experimental design to examine how consumers respond to different advertising strategies. We have used Prolific as our online survey platform, where participants are randomly exposed to one of three types of advertisements. All three ads include the same written description of a liquid dishwashing soap (see Appendix A), but the visual elements differ. One serves as a control with no person shown, while the other two include either a man or a woman to test for gender-related effects.

After giving informed consent, participants were randomly assigned to one of the three ad conditions. They were then asked to complete a structured survey based on the advertisement they viewed. The survey collected data on various aspects such as purchase intention, perceived authenticity of the ad, emotional reaction, and cultural orientation regarding gender roles. All participants were required to be at least 19 years old, and only those who completed the entire survey were included in the final analysis. We have also embedded attention check questions and manipulation check questions throughout the survey to ensure quality and thoughtful responses.

The measurement items include 5-point Likert-scale questions, such as “I will buy this product” for purchase intention, “The message in the advertisement seemed honest and not exaggerated” for ad authenticity, and “The advertisement evoked strong emotions in me” for emotional engagement. Demographic questions include age,

gender, ethnicity, education, employment status, and income level. All measurement scales are provided in Appendix B.

For data analysis, we used SPSS to run statistical tests. First, we ran descriptive statistics to summarize the demographic characteristics of the participants and their overall responses. Then, we conducted ANOVA tests to compare purchase intentions and emotional engagement across the three advertisement conditions. To test for mediation, we used the PROCESS macro developed by Hayes (2014), specifically Model 4, which allowed us to examine parallel mediation effects (Chrimes et al., 2022; Müller-Stewens et al., 2017).

In addition, we ran mediated moderation analysis using Model 7 of the PROCESS macro (Hayes, 2014) to test the interaction effects of our proposed moderator. We also performed regression analysis to explore the relationship between gender representation in advertisements and consumer responses. Finally, we conducted reliability analyses for all the measurement scales to assess the internal consistency of the survey scales.

Sample Size:

We recruited 236 participants from the Prolific online platform to do this experiment. Participants were randomly selected and randomly assigned to one of the conditions. We excluded 59 participants because they failed the attention and manipulation check questions and also took more or less than three minutes of the median time (4 minutes 11 seconds). The final sample consisted of 177 participants with 54.2% identifying as female. The age distribution was concentrated in the 25–44 age range, which accounted for 55.4% of the sample. In terms of political ideology, a majority identified as liberal to slightly liberal (50.9%), while 30.9% identified as conservative to extremely conservative. Most participants were Caucasian/White (68.9%). In terms of educational status, 43.5% held an undergraduate degree and 24.3% held a master's degree. Regarding employment status, 49.7% were employed full-time, while 21.5% were employed part-time. Lastly, household income varied, with the largest proportion (27.7%) reporting an annual income of \$100,000 or more, followed by 23.7% in the \$50,000–\$74,999 range.

Result and Discussion:

In this study, the independent variable was a categorical one where group 1 represents an ad with a woman depicting a traditional gender role, group 2 represents an ad with a man challenging traditional gender roles, and group 3 represents an ad with no gender. For the mediators, perceived authenticity (5-item scale, $\alpha=.94$), and emotional engagement (9-item scale, $\alpha=.937$). The moderator was self-image congruency (3-item scale, $\alpha=.97$). The independent variables were purchase intention (3 items scale, $\alpha=.92$), positive word of mouth (4 items scale, $\alpha=.97$), and negative word of mouth (2 items scale $\alpha=.74$). The scales were remarkably reliable for the study purpose except for the negative word of mouth scale which had acceptable reliability.

Correlation:

The correlation results from Table 1 reveal strong and significant relationships among the main outcome variables. Purchase intention (PI) was strongly and positively related to positive word of mouth (PWOM), $r(175) = .92$, $p < .001$, perceived authenticity (PA), $r(175) = .74$, $p < .001$, and emotional engagement (EE), $r(175) = .79$, $p < .001$. This means that participants who perceived the ad as more authentic and emotionally engaging were also more likely to say they would buy the product and speak positively about it. On the other hand, negative word of mouth (NWOM) was negatively correlated with PI, $r(175) = -.58$, $p < .001$, and with both PA and EE, showing that people who had lower emotional or authentic reactions to the ad were more likely to express negative opinions.

Table 1: Correlation matrix

	1	2	3	4	5	Political orientation	Education	age	income
PI (1)	--	.92***	-.58***	.74***	.79***	.15*	.22***	-.10	.05
PWOM (2)	.92***	--	-.48***	.73***	.82***	.19**	.26***	-.15*	.08
NWOM (3)	-.58***	-.48***	--	-.54***	-.41***	-.04	-.05	.01	.01
PA (4)	.74***	.73***	-.54***	--	.74***	.11	.10	-.07	.05
EE (5)	.79***	.82***	-.41***	.74***	1--	.26***	.28***	-.16*	.07

Note. * $p < .1$. ** $p < .05$. *** $p < .01$. Figure 2: How negative word of mouth is different across different ad types

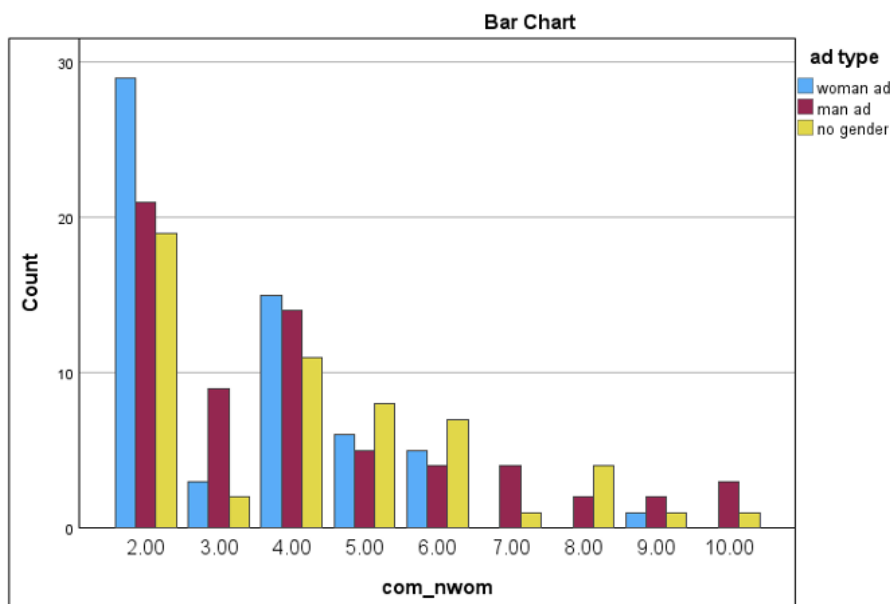
One interesting trend was found when looking at political orientation, which was measured from 1 (extremely liberal) to 7 (extremely conservative). There were small but significant positive correlations with PI, $r(175) = .15$, $p < .05$, PWOM, $r(175) = .19$, $p < .05$, and EE, $r(175) = .26$, $p < .001$. This suggests that more conservative participants were slightly more likely to feel emotionally engaged and report higher purchase intentions and positive word of mouth.

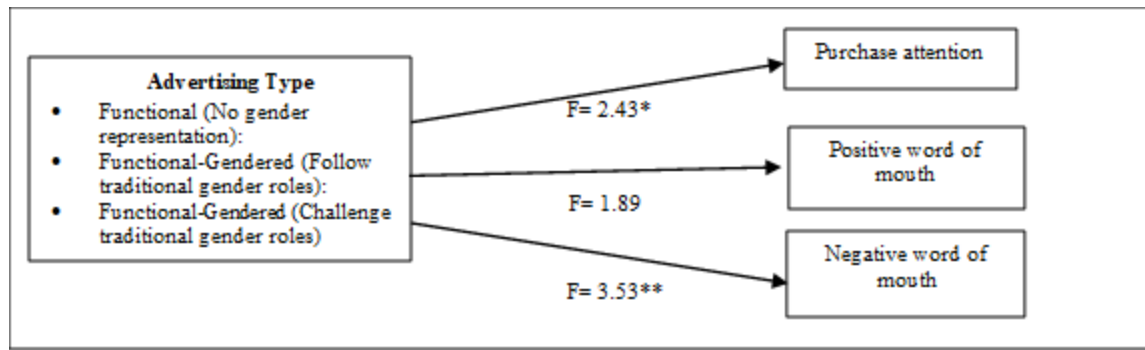
One-Way ANOVA:

A series of one-way ANOVA tests were conducted to examine the effects of ad group (woman, man, no gender representation) on three consumer outcomes: negative word of mouth (NWOM), positive word of mouth (PWOM), and purchase intention (PI).

For negative word of mouth, the results revealed a statistically significant effect of ad group, $F(2, 174) = 3.534$, $p = .031$. This indicates that perceptions of NWOM differed significantly across the three advertisement types. The effect size, measured by eta-squared, was $\eta^2 = .039$, suggesting a small to moderate effect (95% CI [.000, .102]). Similarly, the ANOVA for purchase intention indicated statistically significant group differences, $F(2, 174) = 2.432$, $p = .091$, in 90% confidence interval. The effect size was $\eta^2 = .027$, reflecting a small effect size with the 90% CI ranging from .000 to .071. In contrast, the ANOVA for positive word of mouth did not yield significant differences across groups, $F(2, 174) = 1.886$, $p = .155$. The effect size was small, $\eta^2 = .021$, with a confidence interval ranging from .000 to .061, suggesting limited variance in PWOM explained by ad group.

A post-hoc analysis was conducted (Tukey HSD) to analyze the differences between the groups in terms of negative word-of-mouth behavior. Descriptive statistics showed that participants exposed to the woman ad reported the lowest NWOM ($M = 3.32$, $SD = 1.57$), compared to those who viewed the man ad ($M = 4.16$, $SD = 2.32$) or the no gender ad ($M = 4.22$, $SD = 2.15$). Tukey's HSD post-hoc comparisons indicated that none of the group differences were statistically significant at the $p < .05$ level, although the comparison between the woman ad and the no gender ad approached significance ($p = .053$). The effect size was small to moderate ($\eta^2 = .039$), suggesting that ad type accounted for approximately 3.9% of the variance in NWOM. Additionally, Welch's robust test confirmed the overall group difference, $F(2, 111.58) = 4.45$, $p = .014$.





Note. * $p < .1$. ** $p < .05$. *** $p < .01$.

Figure 3: Group difference using ANOVA

From Figure 2, it is evident that the score for negative word of mouth increased in the ads that showed a man washing dishes or no one in the ad. Showing a negative attitude towards the man's ad may be stemmed from stereotypical beliefs and for ads with nobody in it, maybe lacked emotional engagement (further analyzed in the mediation analysis).

Overall, we found that the ad group had statistically significant impacts on negative word of mouth and purchase intention but did not produce reliable differences in positive word of mouth (from Figure 3). Hence, it supported H1a and H1c.

Mediation Analysis:

To test the indirect effects of ad group on purchase intention, positive word of mouth (PWOM), and negative word of mouth (NWOM), we conducted three separate mediation analyses using Hayes' process Model 4 with 5,000 bootstrap samples (Hayes, 2014) with two parallel mediators: perceived authenticity and emotional engagement. Group 1 (ad featuring a woman) served as the reference category.

Purchase Intention

To examine the mediating role of perceived authenticity and emotional engagement in the relationship between ad group type and consumer purchase intention, Hayes' PROCESS Model 4 (Version 4.2) was employed using 5,000 bootstrap samples and a 90% confidence interval (Hayes, 2014). The independent variable was the ad group (1 = Woman, 2 = Man, 3 = No-Gender), with Woman serving as the reference category. The two parallel mediators were perceived authenticity and emotional engagement, and the dependent variable was purchase intention.

As shown in the total effect model, there was a significant negative effect of the No-Gender ad group compared to the Woman ad group on purchase intention ($\beta = -1.2891$, $SE = 0.5848$, $p = .0288$, 90% CI $[-2.2561, -0.3221]$). However, this total effect became non-significant when the mediators were included in the model. Specifically, the direct effect of the No-Gender ad group on purchase intention was $\beta = -0.1780$ ($SE = 0.3505$, $p = .6123$, 90% CI $[-0.7576, 0.4017]$), while the direct effect of the Man ad group was also non-significant ($\beta = -0.2324$, $SE = 0.3252$, $p = .4758$). These results suggest that one or both of the proposed mediators mediate the relationship between ad group and purchase intention.

The indirect effect of the No-Gender ad group on purchase intention through perceived authenticity was negative but not statistically significant (indirect effect = -0.1856 , $BootSE = 0.2153$, 90% CI $[-0.5935, 0.0792]$). Similarly, the indirect effect for the Man ad group was not significant (indirect effect = -0.2406 , $BootSE = 0.2104$, 90% CI $[-0.6107, 0.0723]$). These findings indicate that perceived authenticity did not significantly mediate the relationship between ad type and purchase intention.

In contrast, the indirect effect of the No-Gender ad group on purchase intention through emotional engagement was statistically significant (indirect effect = -0.9255 , $BootSE = 0.5074$, 90% CI $[-1.8416, -0.1988]$), suggesting that emotional engagement fully mediated the effect of the No-Gender ad on purchase intention.

However, the indirect effect via emotional engagement was not significant for the Man ad group (indirect effect = -0.1738 , BootSE = 0.3030 , 90% CI [$-0.6977, 0.3011$]).

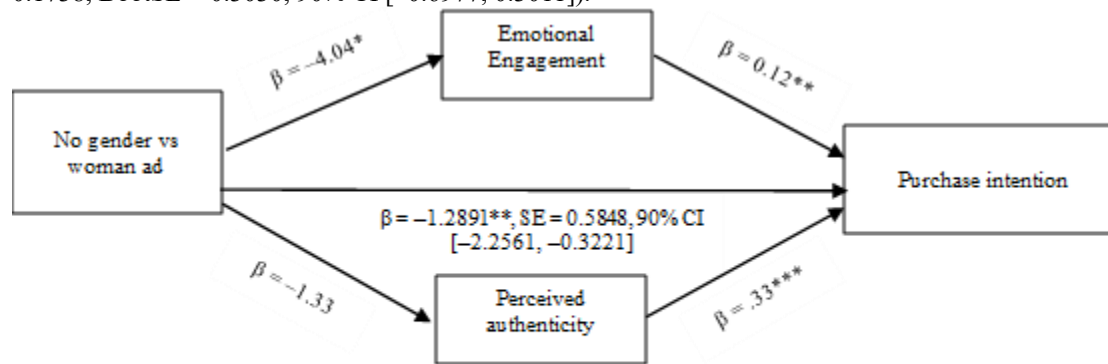


Figure 4: The Mediating Effect of Emotional Engagement and Perceived Authenticity on The Relationship Between Ad Types And Purchase Intention (Note. * $p < .1$. ** $p < .05$. *** $p < .01$.)

Overall, these results support the mediating role of emotional engagement in the effect of ad group on purchase intention (Figure 4), specifically for the No-Gender ad condition. Perceived authenticity, while positively related to purchase intention overall, did not emerge as a significant mediator in this context. These findings suggest that consumers' emotional engagement is vital in translating ad content into behavioral intentions, particularly when gender cues are removed from the advertisement.

Positive Word of Mouth

To examine the mediating role of perceived authenticity and emotional engagement in the relationship between ad group and positive word-of-mouth (PWOM) behavior, we again used Hayes' Process Model 4 (Hayes, 2014) with 5,000 bootstrap samples at the 90% confidence level.

The total effect model revealed a marginally significant negative effect of the no-gender advertisement on PWOM ($\beta = -1.5386$, SE = 0.7925 , $p = .0538$, 90% CI [$-2.8491, -0.2281$]), indicating that participants exposed to no-gender ads were less likely to engage in positive word-of-mouth behavior relative to those in the woman ad condition. However, when both perceived authenticity and emotional engagement were introduced as parallel mediators, the direct effect became non-significant ($\beta = -0.0862$, SE = 0.4588 , $p = .8512$), suggesting full mediation.

To explore the indirect effects, we examined both pathways separately. First, perceived authenticity did not significantly mediate the relationship between ad groups and PWOM. Specifically, the indirect effect from the no-gender ad to PWOM through authenticity was not significant (indirect effect = -0.2583 , BootSE = 0.2136 , 90% CI [$-0.6375, 0.0413$]). Similarly, the man ad also did not show a significant mediation effect through authenticity (indirect effect = -0.2279 , BootSE = 0.2282 , 90% CI [$-0.6376, 0.0672$]).

Conversely, emotional engagement emerged as a significant mediator for the no-gender ad group. The indirect effect of the no-gender ad on PWOM via emotional engagement was statistically significant (indirect effect = -1.1942 , BootSE = 0.5930 , 90% CI [$-2.2302, -0.2826$]). This finding indicates that participants who viewed the no-gender ad reported lower emotional engagement, which in turn reduced their likelihood of engaging in positive word-of-mouth. The same indirect effect was not significant for the male ad (indirect effect = -0.2640 , BootSE = 0.4548 , 90% CI [$-1.0411, 0.4698$]).

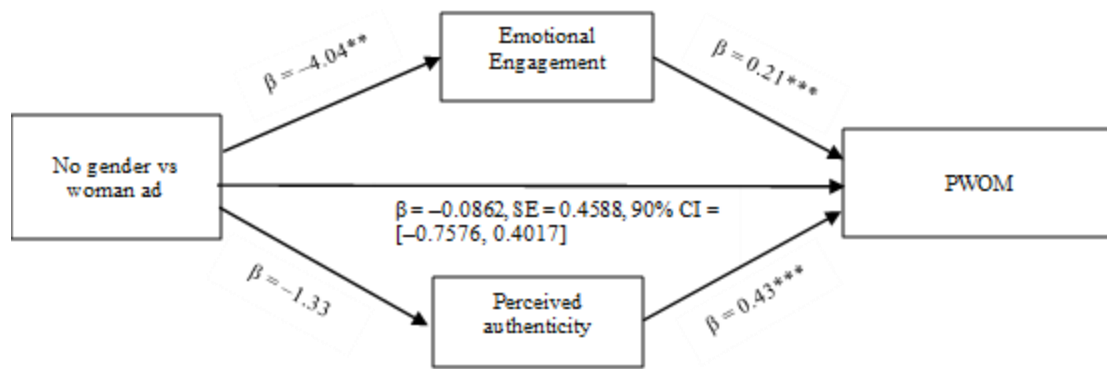


Figure 5: The Mediating Effect of Emotional Engagement and Perceived Authenticity on the Relationship Between Ad Types and PWOM (Note: * $p < .1$. ** $p < .05$. *** $p < .01$.)

Further analysis of the conditional effects of emotional engagement confirmed its strong predictive value on PWOM across all conditions. Specifically, emotional engagement significantly predicted PWOM for woman ($\beta = 0.2180$, $p < .001$), man ($\beta = 0.2574$, $p < .001$), and no-gender ($\beta = 0.2953$, $p < .001$) ad conditions. Perceived authenticity also remained a positive predictor of PWOM, though the strength of association was strongest in the woman ad condition ($\beta = 0.4307$, $p < .001$), and weaker but still significant in both the man ($\beta = 0.2120$, $p = .0135$) and no-gender ($\beta = 0.1932$, $p = .0435$) ad conditions.

In summary, the results shown in Figure 5 provide compelling evidence that emotional engagement fully mediates the negative impact of no-gender advertising on positive word-of-mouth behavior. While perceived authenticity remains a significant predictor of PWOM, it did not mediate the relationship between ad type and behavioral outcomes in this study. These findings emphasize the importance of emotional connection in affecting consumers' willingness to promote a product or brand, particularly in the presence of gender-based cues in advertising.

Negative Word of Mouth

To examine the mediating role of perceived authenticity and emotional engagement in the relationship between advertisement group and negative word-of-mouth behavior (NWOM), we applied the same analysis as we did for the purchase intention and positive word of mouth.

The total effect model revealed a statistically significant positive effect of both the woman ($\beta = 0.8342$, $SE = 0.3688$, $p = .0249$, 90% CI [0.2243, 1.4441]) and man ($\beta = 0.9002$, $SE = 0.3849$, $p = .0205$, 90% CI [0.2638, 1.5366]) advertisements on NWOM compared to the no-gender condition. These findings suggest that identity-based ad content heightened the likelihood of consumers engaging in negative word-of-mouth behavior.

However, once perceived authenticity and emotional engagement were included as parallel mediators, the direct effect of the woman ad was marginal ($\beta = 0.5588$, $SE = 0.3128$, $p = .0758$, 90% CI [0.0415, 1.0761]) and the direct effect of the man ad became non-significant ($\beta = 0.4099$, $SE = 0.3372$, $p = .2257$, 90% CI [-0.1477, 0.9675]). These patterns suggest partial mediation of the effect of group on NWOM through the included mediators.

We further examined the indirect effects through each mediator independently. First, perceived authenticity did not significantly mediate the relationship between ad groups and NWOM. The indirect effect for the woman ad was non-significant (indirect effect = 0.3299, BootSE = 0.2747, 90% CI [-0.0942, 0.7869]), as was the case for the man ad (indirect effect = 0.2808, BootSE = 0.2220, 90% CI [-0.0072, 0.7047]). Thus, although perceived authenticity negatively predicted NWOM, it did not explain the relationship between ad group and NWOM in a statistically significant manner.

Similarly, emotional engagement did not emerge as a statistically significant mediator. For the woman ad condition, the indirect effect via emotional engagement was negative but not significant (indirect effect = -0.0545,

BootSE = 0.1147, 90% CI [-0.2714, 0.0861]). For the man ad, the indirect effect was positive and again non-significant (indirect effect = 0.2095, BootSE = 0.1853, 90% CI [-0.0339, 0.5474]).

Conditional effects analyses were also conducted to assess whether the influence of authenticity and emotional engagement on NWOM varied across ad group conditions. Perceived authenticity significantly predicted lower NWOM in both the woman ($\beta = -0.3068$, $p < .001$) and man ($\beta = -0.2101$, $p = .003$) conditions, but not in the no-gender condition ($\beta = -0.0941$, $p = .257$). These findings indicate that authenticity may act as a protective factor, particularly when gender cues are present in the advertisement. Conversely, emotional engagement did not significantly predict NWOM in any of the conditions (all $p > .13$).

The results in Figure 6 indicate that while gendered advertisements increase NWOM, neither perceived authenticity nor emotional engagement significantly mediate this relationship. However, perceived authenticity plays a conditional role by mitigating NWOM in the context of gendered advertisements. These findings suggest that although emotional engagement may play a central role in promoting positive WOM, its influence is less pronounced when predicting negative behavioral responses such as NWOM. In contrast, authenticity appears to be more effective in buffering against backlash, particularly in identity-sensitive advertising contexts.

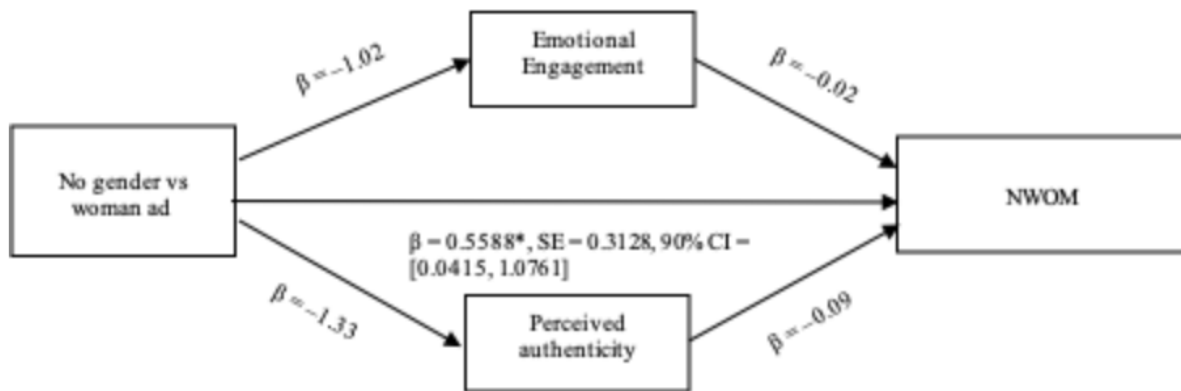


Figure 6: The Mediating Effect of Emotional Engagement and Perceived Authenticity on the Relationship Between Ad Types and NWOM (Note: * $p < .1$. ** $p < .05$. *** $p < .01$.)

Table 2: An overview of the hypotheses test based on the mediation analysis

Hypothesis	Description	Supported?
H3a	Ad type → Emotional engagement → Purchase Intention	Yes
H3b	Ad type → Emotional engagement → Positive Word of Mouth (PWOM)	Yes
H3c	Ad type → Emotional engagement → Negative Word of Mouth (NWOM)	No
H4a	Ad type → Perceived authenticity → Purchase Intention	No
H4b	Ad type → Perceived authenticity → Positive Word of Mouth (PWOM)	No
H4c	Ad type → Perceived authenticity → Negative Word of Mouth (NWOM)	No

Overall, from Table 2 and we can conclude that the mediation analyses support our two hypotheses, but the results do not support the rest.

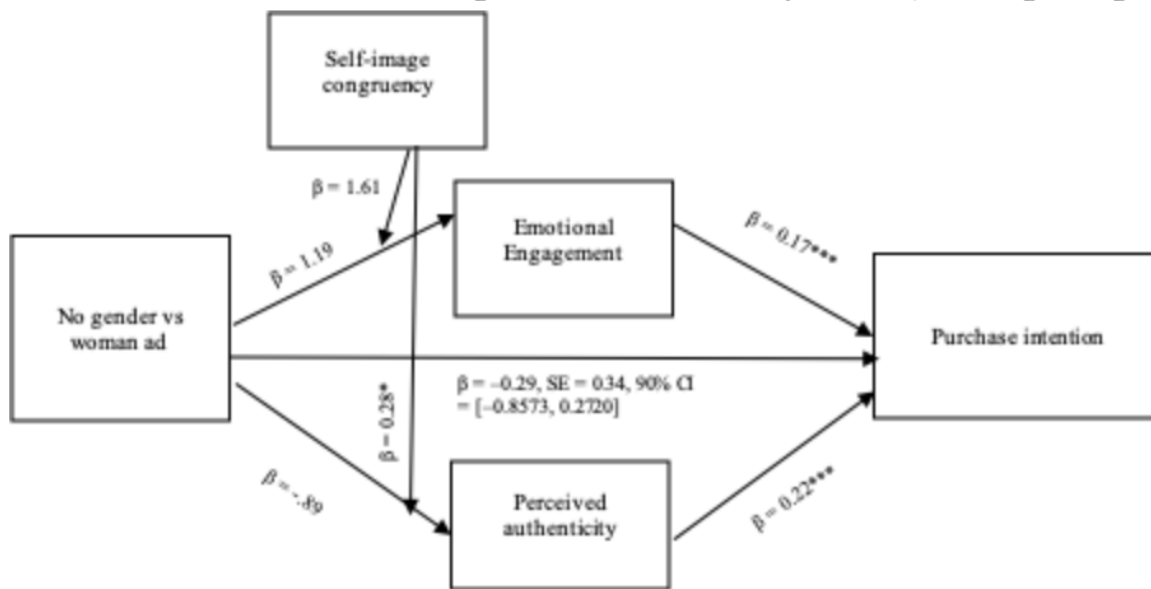
Moderated Mediation analysis:

To further investigate the psychological mechanisms underlying the impact of advertisement type on consumer purchase intention, positive word of mouth and negative word of mouth this study employed Hayes' Process Model 7 (Version 4.2), which allows for the estimation of moderated mediation effects (Hayes, 2014). In this model, perceived authenticity and emotional engagement were tested as parallel mediators with self-image

congruency serving as the moderator. Bootstrap estimates were generated using 5,000 samples at a 90% confidence interval to enhance the robustness of the mediation pathways.

Purchase intention

The results from the moderated mediation analysis revealed that, after including both mediators, the direct effects of ad type on purchase intention became statistically non-significant. Specifically, neither the man ad ($\beta = -0.2309$, $p = .4772$) nor the no-gender ad ($\beta = -0.2927$, $p = .3926$) had a significant direct influence on purchase intention compared to the woman ad (reference category). This finding implies that the influence of ad type on purchase decision operates primarily through the proposed mediators, rather than via a direct route.



Concerning perceived authenticity as a mediator, the results showed that its conditional indirect effect varied across levels of self-image congruency. However, across all tested values (low, moderate, and high), the confidence intervals for both man and no-gender ad conditions encompassed zero, indicating non-significant moderated mediation effects. For instance, at moderate levels of self-image congruency, the indirect effect from man ad to purchase intention through authenticity was $\beta = -0.1986$ (BootCI [-0.4639, 0.0452]), and from no-gender ad was $\beta = -0.0993$ (BootCI [-0.3546, 0.1457]).

Similarly, the moderated mediation pathway via emotional engagement did not yield significant effects. The index of moderated mediation for the man ad was $\beta = -0.0366$ (BootCI [-0.1139, 0.0404]), while for the no-gender ad it was $\beta = -0.0078$ (BootCI [-0.0672, 0.0576]). These results confirm that emotional engagement did not significantly mediate the relationship between ad type and purchase intention across varying levels of self-image congruency.

Taken together, the findings suggest that while perceived authenticity and emotional engagement are important psychological constructs, their mediating effects are not significantly contingent on consumers' self-image congruency. In other words, self-congruity did not function as a boundary condition in the indirect pathways between ad types and purchase intention. This contrasts with prior expectations based on social identity and self-congruity theories, which suggest that consumers are more responsive to ad content that aligns with their self-perceptions.

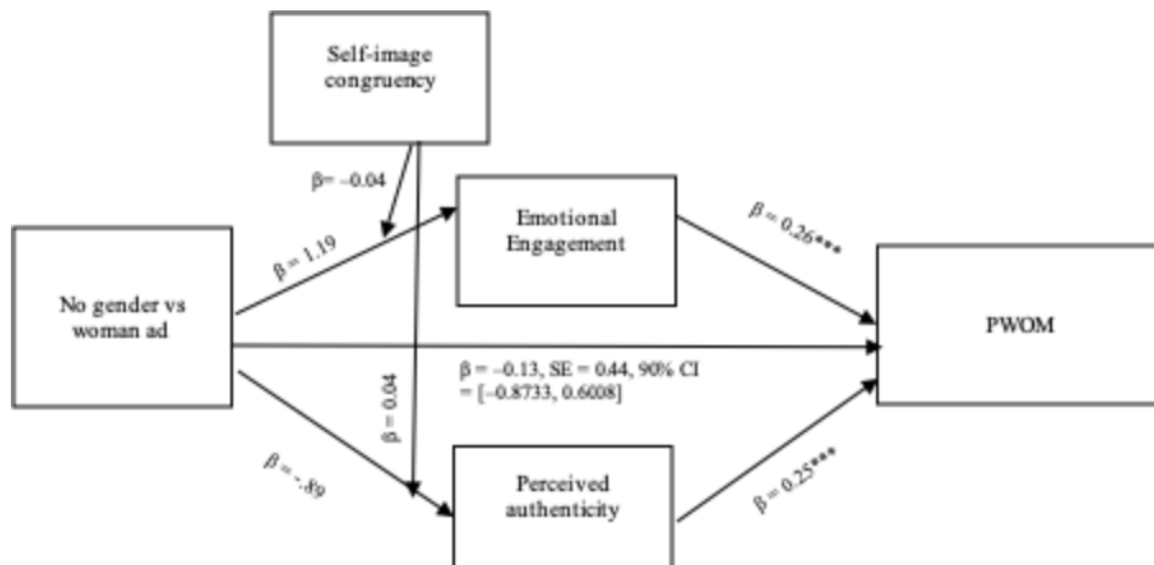
Positive Word of Mouth:

The model predicting PWOM was statistically significant ($F(4, 172) = 101.65$, $p < .001$, $R^2 = .703$). When both mediators were included in the model, the direct effects of man (X1: $\beta = -0.2237$, $p = .598$) and no-gender (X2: $\beta = -0.1362$, $p = .760$) advertisements on PWOM were not statistically significant, suggesting full mediation.

In terms of mediation, both perceived authenticity ($\beta = 0.2511$, $p < .001$) and emotional engagement ($\beta = 0.2638$, $p < .001$) were found to be significant predictors of PWOM, confirming their central role in influencing consumer communication behavior.

However, the conditional indirect effect analysis revealed no statistically significant moderated mediation through either pathway across levels of self-image congruency. For example, at moderate levels of com_img ($W = 9$), the indirect effect of the man ad via authenticity was $\beta = -0.2251$ (BootCI $[-0.5440, 0.0439]$) and via emotional engagement was $\beta = -0.0748$ (BootCI $[-0.5276, 0.3634]$); both intervals included zero. Similarly, for the no-gender ad at the same level, the indirect effects via authenticity ($\beta = -0.1126$) and emotional engagement ($\beta = -0.4195$) were also non-significant.

The index of moderated mediation further supported these findings. None of the indices for either mediator yielded confidence intervals that excluded zero (e.g., authenticity $\times$ man ad: index = 0.0714, BootCI $[-0.0155, 0.1680]$; emotional engagement $\times$ no-gender ad: index = -0.0118 , BootCI $[-0.1098, 0.0851]$), indicating that self-image congruency did not significantly moderate the mediation effects of authenticity or emotional engagement on PWOM.



These results indicate that while perceived authenticity and emotional engagement are significant mediators of the relationship between ad type and PWOM, self-image congruency does not moderate these indirect effects. Thus, although gender-relevant psychological mechanisms shape positive word-of-mouth behavior, their influence appears stable regardless of the consumer's level of self-image alignment with the ad. This insight highlights the universal role of authenticity and emotional resonance in consumer communication, even in the absence of self-image congruence.

Negative Word of Mouth

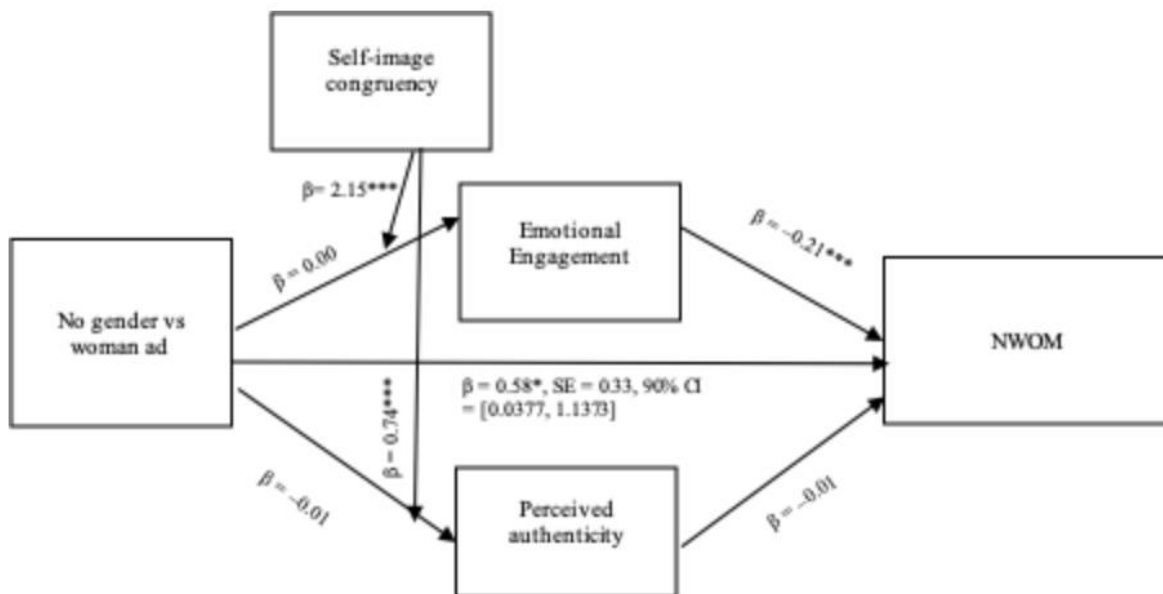
The overall model predicting NWOM was statistically significant, $F(4, 172) = 19.44$, $p < .001$, $R^2 = .311$. Both perceived authenticity ($\beta = -0.2194$, $p < .001$) and emotional engagement ($\beta = -0.0048$, $p = .814$) were entered as mediators. Among these, only perceived authenticity significantly predicted NWOM, with higher authenticity associated with lower NWOM. Emotional engagement, however, did not have a significant effect on NWOM in this model.

The direct effects of ad types on NWOM were marginally significant. Specifically, the man ad ($X1$) had a positive direct effect on NWOM ($\beta = 0.5934$, $p = .062$), as did the no-gender ad ($X2$) ($\beta = 0.5875$, $p = .079$), though both effects were slightly above the conventional threshold for statistical significance.

The conditional indirect effects of ad type on NWOM via perceived authenticity were explored at three levels of the moderator (com_img): low ($W = 4$), medium ($W = 9$), and high ($W = 13$). For the man ad, the indirect effect via perceived authenticity was marginally positive at low levels of self-image congruency ($\beta = 0.5086$, BootCI $[-0.0479, 1.2166]$) and diminished at moderate ($\beta = 0.1967$, BootCI $[-0.0378, 0.4880]$) and high ($\beta = -0.0529$, BootCI $[-0.3104, 0.1576]$) levels. Notably, the index of moderated mediation for this path was negative and marginally non-significant (index = -0.0624 , BootCI $[-0.1580, 0.0102]$), suggesting a potential—but not definitive—conditional effect of self-image congruency on the pathway from the man ad through perceived authenticity to NWOM.

For the no-gender ad, the indirect effect via perceived authenticity was consistently non-significant across all levels of com_img. The index of moderated mediation for this path was also non-significant (index = -0.0107 , BootCI $[-0.0964, 0.0545]$).

Regarding the emotional engagement path, none of the conditional indirect effects were statistically significant for either ad type across any level of self-image congruency. The indices of moderated mediation were negligible and their confidence intervals included zero (e.g., for X1: index = 0.0010 , BootCI $[-0.0081, 0.0139]$; for X2: index = 0.0002 , BootCI $[-0.0078, 0.0072]$), indicating no evidence that self-image congruency moderated the indirect effect via emotional engagement.



These results reveal that while the man and no-gender ads tended to increase NWOM relative to the woman ad, perceived authenticity was the only mediator that significantly predicted reduced NWOM. However, its moderated mediation effects were weak and non-significant, indicating that the buffering effect of authenticity on NWOM is not reliably dependent on self-image congruency. Likewise, emotional engagement did not significantly mediate the relationship between ad type and NWOM, nor was it moderated by self-image congruency.

In sum, while ad type appears to influence NWOM and authenticity remains an important predictor, the expected interaction with self-congruity was not supported (H5 and H6 could not be supported). These findings suggest that identity-based perceptions such as authenticity can influence negative consumer reactions, but this influence may not vary meaningfully by how well the ad aligns with the consumer's self-concept.

General Discussion

The one-way ANOVA of this study found that although the groups differed significantly in terms of negative word of mouth, but not differ significantly enough for purchase intention, positive word of mouth. More

research on this revealed that those who watched the advertisement featuring a man washing dishes had negative word-of-mouth. This is in keeping with Gender Schema theory, which holds that certain individuals base their decisions on their gender (either masculine or feminine), and that process begins in early life (Bem, 1981). The aim of this study was to investigate if people still act in line with their established gender stereotyping perspective. Our results revealed an opposite situation, even if we expected people to be less sensitive to these stereotyped gender portrayals nowadays. The no gender advertisement also showed a higher tendency of negative word-of-mouth, presumably as the subjects found it emotionally boring.

Based on the mediation studies, the no-gender commercial produced a noticeably lower buying intention than the woman's advertisement. Emotional involvement, however, completely mediated this impact, meaning that participants were less emotionally involved with the no-gender material, which thus lowered their desire to buy. Although perceived authenticity was favorably linked with purchase intention, it did not mediate this relation significantly. Analogously, in the event of positive word-of-mouth, the no-gender advertisement similarly produced somewhat reduced PWOM, an outcome formerly entirely mediated by emotional involvement. While less involvement in the no-gender condition reduced their inclination to promote the goods, consumers who felt emotionally attached to the material were more likely to support the ad. While authenticity stayed a good indicator of PWOM, it did not act as a major mediator in the relationship between ad type and positive word-of-mouth activity.

By contrast, the results for negative word of mouth exposed another dynamic. Compared to the no-gender commercial, both the woman's and the man's ad conditions considerably raised NWOM, suggesting that gendered advertising can intensify consumer complaints. Still, neither emotional involvement nor perceived authenticity mediated this association. Rather, authenticity was a conditional factor, where its existence essentially lowered NWOM, but only concerning ads with gendered content. This implies that even if it does not explicitly control the route from ad type to NWOM, authenticity might help to offset dislikeness. These findings taken together highlight the relevance of emotional involvement in generating favorable consumer reactions, particularly in cases when gender signals are lacking from the message. On the other hand, especially in identity-relevant advertising, seeming authenticity is more crucial in controlling negative emotions. These results emphasize for marketers the importance of considering not only what is stated but also how it is felt and perceived, as both emotional resonance and authenticity turn up as main drivers influencing ad effects.

Against expectations, the hypothesized moderated mediation effects were essentially unsupported. Challenging presumptions made from self-congruity theory (Sirgy, 2018), self-image congruency did not significantly alter the indirect effects of each mediator across outcomes. In the case of NWOM, perceived authenticity was the only significant predictor; its indirect path from ad type showed some marginal effects that reduced with increasing degrees of self-image congruency, implying that the protective value of authenticity may be attenuated in consumers who feel more aligned with the representation of the ad. Still, this connection lacked statistical clarity.

These findings suggest that even when gendered advertising techniques might affect consumer attitudes and behavior, their efficacy does not always depend on consumers' self-image fit with the advertisement. This runs counter to earlier research stressing congruency as the main determinant of communication effectiveness. Rather, regardless of self-perception alignment, the emotional and authenticity-based traits of the material seem to be generally valuable.

Limitations and Future Research:

The results did not support some of the hypotheses of our study, which means this study has some limitations. Firstly, we conducted only one study, which was an experiment for this research. In this one study, we only showed one product type (dishwashing soap) to the participants. This is a utilitarian product category because it is functional and instrumental (Lu et al., 2016) and also involves low involvement (Kuenzel & Musters, 2007). Hence, there was a need to include more product categories, like hedonic and high involvement products, in the study. Moreover, the manipulation of the ads (non-gender vs man vs woman) did not work well as an independent variable. It lacked narratives and short videos or clips, which can be a reason for its lower effectiveness. Also, this study only included participants from the US which means there was a lack of cultural differences and generalizability in the study. Finally, we found the ads challenging gender roles had higher negative word of mouth behavior, but it is not clear what moderated or mediated this behavior. Hence, there are some potential moderators or

mediators such as gender stereotype mindset, sexual preference, and awareness of feminism or perceived skepticism to explain this behavior, which were not considered in this study.

To make up for the limitations mentioned above, for our future study, we will focus on adding more studies. We will try to design a field study and analyze some secondary data to see the effects of different ad types among consumers. Also, in the next step, we can include some key informant interviews from the marketers to get clearer ideas on what some of the important factors they consider while designing any ad and how consumers perceive those. Also, ads based on social media platforms will be studied because each of the advertising platforms has different crowds, so it depends a lot on the consumer type (age, gender identity, etc.). Then the next paper will add more product categories like luxury or hedonic products, or high involvement products. To design a more engaging ad content, we will be giving narratives or short clips as ads. Additionally, we found that self-image congruency acted as an independent variable, so next time we will add self-image congruency as the independent variable and manipulate it. We found that perceived authenticity was not a mediator in this study, so for our next study, we will exclude this and include other mediators such as perceived risk with the product, perceived skepticism and perceived product quality. Also, there was no moderation effect of self-image congruency in our study, so next time we will include gender identity, sexual preference, awareness of feminism, perceived skepticism, cultural orientation and gender stereotypical mindset as our moderators. As we would like to add cultural orientation as one of the moderators, participants from different countries and cultures will be included in that study.

Theoretical and Managerial Contribution:

Though our study could not support all our hypotheses, we still have some theoretical and managerial contributions of this research. Firstly, our research found that in this modern society, where we believe that gender stereotypes have lessened drastically, it is still prevalent which supports Gender Schema Theory (Bem, 1981). This is supported by the mediated role of emotional engagement and the direct effect of self-image congruency. When consumers see any ad that supports their gender schema (masculine or feminine), it means they have a higher self-image congruency, which also increases emotional engagement. Also, it extends the dual processing theory as we found consumers preferred the functional gendered ads more than the functional ad. Furthermore, the challenging gender roles ads can be included as a brand activism message towards gender inequality in many societies, so it also adds to the literature of brand activism (Jacobson et al., 2018; Rasmussen, 2021).

In addition to these theoretical implications, our study has managerial implications. Marketers need to be strategic while designing ads for their brands because if they depict any challenging gender roles in the ads, they can have backlash (Ahmad et al., 2024). Sometimes, these types of depictions contradict the mindset of the target markets, which increases the negative word-of-mouth behavior and decreases purchase intention among the consumers. Also, marketers should choose the media and ad types based on the medium. For example, for Facebook, Instagram, and TikTok, they might need to make different types of ads than ads for TV, newspapers or magazines. Moreover, marketers should make their ads engaging enough to attract consumers' attention, for example, the ads should have more elements like narratives or aesthetic imagery in terms of print advertising or short clips for electronic media. This comes to carefully choosing the cues. Some cues are better for certain products, and some cues are not. Hence, based on the product category, the practitioners have to decide which cues will be more effective for their ads. From a managerial standpoint, this realization underlines the need to design campaigns that inspire real emotional involvement and represent a unified brand goal instead of customizing material just around demographic or identity matching. Moreover, practitioners should focus on which factor they want to highlight in their ad. For example, if they want to increase the perceived authenticity of their brand through gendered ads, then it might not be a great stimulus, as we have not found any mediating role. Hence, they should focus on emotional engagement while adding gender role cues in their ads to get consumers' attention. Finally, we strongly recommend that before designing any ad, marketers should do thorough market research. After all, it can surprise them as our results were unexpected because people preferred traditional gender roles depiction more than a challenging one.

Conclusion

Our study contributes to the growing body of literature examining the impact of gender role representation in advertising, offering insights into how modern consumers respond to varying portrayals of gender in marketing content. While not all our hypotheses were supported, the findings nonetheless reveal significant patterns in consumer preferences that are both revealing and concerning. Specifically, the study demonstrated that consumers continue to express more favorable responses, both in terms of emotional engagement and behavioral intent, when women are depicted in traditional domestic roles, as opposed to when men are shown occupying these same roles.

This outcome is particularly striking in the context of contemporary societal discourse, where there is widespread advocacy for gender equality and more inclusive representations. The persistence of traditional gender role preferences among consumers suggests that deep-rooted cultural schemas continue to influence perception, despite broader societal progress. These findings underscore a dissonance between societal ideals and consumer realities, highlighting a gap that demands closer academic and practical scrutiny.

The implications of this study extend beyond the realm of advertising effectiveness. They raise broader questions about the societal internalization of gender roles and the slow pace of cultural change in how masculinity and femininity are constructed and accepted in everyday contexts. From an academic standpoint, this provides a fertile ground for future research aimed at understanding the psychological, cultural, and social factors that perpetuate these preferences. Variables such as gender identity, cultural orientation, exposure to feminist discourse, and cognitive rigidity could help explain the persistence of these biases.

From a managerial perspective, our findings serve as a cautionary note for marketers and advertisers who wish to engage in socially responsible messaging. While progressive advertising has the potential to shape public discourse, it must also contend with audience readiness and existing cognitive frameworks. Future research can help bridge this divide by identifying ways in which brands can introduce progressive representations more effectively, through storytelling, humor, or context-sensitive framing, to reduce resistance and enhance consumer receptivity.

Ultimately, our study opens a vital conversation about the ongoing challenges of gender representation in advertising. It suggests that while the aspiration for gender inclusivity is present in public narratives, the translation into consumer behavior remains complex and, at times, resistant. Continued investigation into this phenomenon will not only inform marketing strategy but also contribute to broader efforts in reshaping societal norms through media and communication.

Reference:

- Aaker, D. (2018). *Creating Signature Stories: Strategic Messaging that Persuades, Energizes and Inspires*. Morgan James Publishing.
- Achmad, A. Z., Santosa, H. D., & Putri, S. K. (2022). Analyzing the Effectiveness of Emotional Appeals in Advertising: A Comparative Study of Different Age Groups. *Jurnal Office*, 7(2), Article 2. <https://doi.org/10.26858/jo.v7i2.45364>
- Afendi, A. (2023). The Effect of Price Sensitivity on Purchase Intention is Mediated by Advocacy and Emotion on Consumers of Pharmaceutical Companies in Jakarta. *Journal of Social Research*, 2(5), 1737–1752. <https://doi.org/10.55324/josr.v2i5.881>
- Ahmad, F., Guzmán, F., & Al-Emran, M. (2024). Brand activism and the consequence of woke washing. *Journal of Business Research*, 170, 114362. <https://doi.org/10.1016/j.jbusres.2023.114362>
- Akbari, M. (2015). Different Impacts of Advertising Appeals on Advertising Attitude for High and Low Involvement Products. *Global Business Review*, 16(3), 478–493. <https://doi.org/10.1177/0972150915569936>
- Aruna, M., & Gunasundari, K. (2022). Empowering of Feminine in Indian Advertisements. *International Journal of Computer Communication and Informatics*. <https://doi.org/10.34256/ijcci2212>
- Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review*, 88(4), 354–364. <https://doi.org/10.1037/0033-295X.88.4.354>
- Beverland, M. B., & Farrelly, F. J. (2010). The quest for authenticity in consumption: Consumers' purposive choice of authentic cues to shape experienced outcomes. *Journal of Consumer Research*, 36(5), 838–856.
- Bishop, J. D. (2000). Is Self-Identity Image Advertising Ethical? *Business Ethics Quarterly*. <https://doi.org/10.2307/3857882>
- Bizuayehu, E. (2020). The Effectiveness of Integrated Marketing Communication for High Involvement Product Purchase Decision: In Case of St. Mary's University Students [PhD Thesis, ST. MARY'S UNIVERSITY].

- <http://repository.smuc.edu.et/bitstream/123456789/5720/1/Elias%20Bizuyayehu%20The%20Effectiveness%20of%20Integrated%20Marketing%20Communication.pdf>
- Blank, A. S., Loveland, K. E., Cheng, A., Beck, S. A., & Rundus, A. (2023). Responding to COVID-19: The Impact of Corporate Social Responsibility on Consumer Behavior. *International Journal of Consumer Studies*. <https://doi.org/10.1111/ijcs.12982>
- Brüggen, E. C., Foubert, B., & Gremler, D. D. (2011). Extreme Makeover: Short- and Long-Term Effects of a Remodeled Servicescape. *Journal of Marketing*, 75(5), 71–87. <https://doi.org/10.1509/jmkg.75.5.71>
- Caruelle, D. (2024). Are brands that perform gendered product differentiation perceived as sexist? An experimental investigation. *Journal of Product & Brand Management*, 33(5), 576–589. <https://doi.org/10.1108/JPBM-07-2023-4590>
- Chandon, P., Morwitz, V. G., & Reinartz, W. (2005). Do Intentions Really Predict Behavior? Self-Generated Validity Effects in Survey Research. *Journal of Marketing*. <https://doi.org/10.1509/jmkg.69.2.1.60755>
- Chang, H. J. (Julie), O’Boyle, M., Anderson, R. C., & Suttikun, C. (2016). An fMRI study of advertising appeals and their relationship to product attractiveness and buying intentions. *Journal of Consumer Behaviour*, 15(6), 538–548. <https://doi.org/10.1002/cb.1591>
- Cheah, J.-H., Sarstedt, M., Ringle, C. M., Ramayah, T., & Ting, H. (2018). Convergent validity assessment of formatively measured constructs in PLS-SEM: On using single-item versus multi-item measures in redundancy analyses. *International Journal of Contemporary Hospitality Management*, 30(11), 3192–3210. <https://doi.org/10.1108/IJCHM-10-2017-0649>
- Chieh Lu, A. C., Gürsoy, D., & Lu, C. Y. (2015). Authenticity Perceptions, Brand Equity and Brand Choice Intention: The Case of Ethnic Restaurants. *International Journal of Hospitality Management*. <https://doi.org/10.1016/j.ijhm.2015.07.008>
- Choi, H., Yoon, Hye Jin, Paek, Hye-Jin, & Reid, L. N. (2012). ‘Thinking and feeling’ products and ‘utilitarian and value-expressive’ appeals in contemporary TV advertising: A content analytic test of functional matching and the FCB model. *Journal of Marketing Communications*, 18(2), 91–111. <https://doi.org/10.1080/13527266.2010.484581>
- Chrimes, C., Boardman, R., Vignali, G., & McCormick, H. (2022). Investigating how online fashion product page design affects the consumer’s clothing fit appraisal. *Journal of Consumer Behaviour*, 21(6), 1478–1493. <https://doi.org/10.1002/cb.2100>
- Delgado-Ballester, E., & Sabiote, E. F. (2015). Brand Experimental Value Versus Brand Functional Value: Which Matters More for the Brand? *European Journal of Marketing*. <https://doi.org/10.1108/ejm-02-2014-0129>
- Demir, Y., Dağ, E., Kılınç, Z. A., KARAKUŞ, P., & Özpınar, S. (2024). Hospital Brand Image and Determinants in Medical Tourism: The Case of Samsun. *Geojournal of Tourism and Geosites*. <https://doi.org/10.30892/gtg.53204-1216>
- Duffy, M. (2001). Advertising in consumer allocation models: Choice of functional form. *Applied Economics*, 33(4), 437–456. <https://doi.org/10.1080/00036840121721>
- Ellitan, L. (2021). The Influence of Perceived Authenticity Towards Purchase Intention From the Restaurant Image and Positive Emotion in Zangran Di Café in Surabaya. *Journal of Entrepreneur & Business*. <https://doi.org/10.24123/jeb.v2i1.4024>
- Fard Shokurloo, S. L., SHAHBAZI, M., & Seo, W. J. (2020). Reviews Key Features of Word-of-Mouth (WOM) Advertising and Their Impact on Sports Consumer. *Journal of Sports and Applied Science*. <https://doi.org/10.13106/jsas.2020.vol4.no2.1>

- Fatemi, H., Leijerholt, U., Rezvani, Z., & Schnittka, O. (2023). Consumer Responses to Sustainable Product Branding Strategies: A literature Review and Future Research Agenda. *Baltic Journal of Management*. <https://doi.org/10.1108/bjm-11-2022-0412>
- Feng, J., & Papatla, P. (2011). Advertising: Stimulant or Suppressant of Online Word of Mouth? *Journal of Interactive Marketing*. <https://doi.org/10.1016/j.intmar.2010.11.002>
- Garg, P., Raj, R., Kumar, V., Singh, S., Pahuja, S., & Sehwat, N. (2023). Elucidating the role of consumer decision making style on consumers' purchase intention: The mediating role of emotional advertising using PLS-SEM. *Journal of Economy and Technology*, 1, 108–118. <https://doi.org/10.1016/j.ject.2023.10.001>
- Geuens, M., Pelsmacker, P. D., & Fasseur, T. (2011). Emotional Advertising: Revisiting the Role of Product Category. *Journal of Business Research*. <https://doi.org/10.1016/j.jbusres.2010.03.001>
- Guo, Y., & Zhu, Z. (2023). Intangible Cultural Heritage Souvenirs: Image Congruity and Brand Influence on Tourists' Purchase Intention. *Tourism Review*. <https://doi.org/10.1108/tr-04-2022-0196>
- Hayes, A. F. (2014). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. Guilford Publications. <http://ebookcentral.proquest.com/lib/siucarbondale/detail.action?docID=1186800>
- Hess, A. C., & Melnyk, V. (2016). Pink or Blue? The Impact of Gender Cues on Brand Perceptions. *European Journal of Marketing*. <https://doi.org/10.1108/ejm-11-2014-0723>
- Holmes, J. H., & Crocker, K. E. (1987). Predispositions and the comparative effectiveness of rational, emotional and discrepant appeals for both high involvement and low involvement products. *Journal of the Academy of Marketing Science*, 15(1), 27–35. <https://doi.org/10.1007/BF02721951>
- Hosany, S., & Martin, D. (2012). Self-image congruence in consumer behavior. *Journal of Business Research*, 65(5), 685–691. <https://doi.org/10.1016/j.jbusres.2011.03.015>
- Iqbal, S., & Siddiqui, D. A. (2019). The Impact of Deceptive Advertising on Customer Loyalty: A Case of Telecommunication Industry in Karachi, Pakistan. *International Journal of Industrial Marketing*. <https://doi.org/10.5296/ijim.v4i1.14607>
- Jacobson, C., Katalin Abdallah, L., Liasse, D., & Lund, E. (2018). Femvertising and its effects on brand image: A study of men's attitude towards brands pursuing brand activism in their advertising. *LBMG Strategic Brand Management-Masters Paper Series*. <https://lup.lub.lu.se/luur/download?func=downloadFile&recordId=8963765&fileId=8963766>
- Johar, G. V., Moreau, P., & Schwarz, N. (2003). Gender Typed Advertisements and Impression Formation: The Role of Chronic and Temporary Accessibility. *Journal of Consumer Psychology*, 13(3), 220–229. https://doi.org/10.1207/S15327663JCP1303_04
- Johar, J. S., & Sirgy, M. J. (1991). Value-Expressive Versus Utilitarian Advertising Appeals: When and Why to Use Which Appeal. *Journal of Advertising*. <https://doi.org/10.1080/00913367.1991.10673345>
- Kang, J.-A., Hong, S., & Hubbard, G. T. (2020). The role of storytelling in advertising: Consumer emotion, narrative engagement level, and word-of-mouth intention. *Journal of Consumer Behaviour*, 19(1), 47–56. <https://doi.org/10.1002/cb.1793>
- Kathpalia, S. S. (2019). Redefining gender stereotypes in Indian English TV advertising. *World Englishes*, 38(3), 486–499. <https://doi.org/10.1111/weng.12425>

- Khan, Y., Hameed, I., & Akram, U. (2022). What drives attitude, purchase intention and consumer buying behavior toward organic food? A self-determination theory and theory of planned behavior perspective. *British Food Journal*, 125(7), 2572–2587. <https://doi.org/10.1108/BFJ-07-2022-0564>
- Kim, E. Y., & Kim, Y. (2004). Predicting Online Purchase Intentions for Clothing Products. *European Journal of Marketing*. <https://doi.org/10.1108/03090560410539302>
- Kim, J., & Lennon, S. J. (2013). Effects of Reputation and Website Quality on Online Consumers' Emotion, Perceived Risk and Purchase Intention. *Journal of Research in Interactive Marketing*. <https://doi.org/10.1108/17505931311316734>
- Kim, J., & Song, H. (2020). The Influence of Perceived Credibility on Purchase Intention via Competence and Authenticity. *International Journal of Hospitality Management*. <https://doi.org/10.1016/j.ijhm.2020.102617>
- Kolar, T., & Zabkar, V. (2010). A consumer-based model of authenticity: An oxymoron or the foundation of cultural heritage marketing? *Tourism Management*, 31(5), 652–664. <https://doi.org/10.1016/j.tourman.2009.07.010>
- Kuang, R., Hu, C., Huo, S., Shi, Y., Tang, X., & Mao, L. (2024). Study on the Psychological Effects of Intangible Cultural Heritage Advertising with Different Degrees of Situational Involvement. *Behavioral Sciences*, 14(7), Article 7. <https://doi.org/10.3390/bs14070623>
- Kuenzel, J., & Musters, P. (2007). Social interaction and low involvement products. *Journal of Business Research*, 60(8), 876–883.
- Lafky, S., Duffy, M., Steinmaus, M., & Berkowitz, D. (1996). Looking through Gendered Lenses: Female Stereotyping in Advertisements and Gender Role Expectations. *Journalism & Mass Communication Quarterly*, 73(2), 379–388. <https://doi.org/10.1177/107769909607300209>
- Larrison, B. (2024, May 29). 2024 Advertising Agency Report. Basis Technologies. <https://basis.com/reports/2024-advertising-agency-report>
- Lee, J., & Hong, I. B. (2016). Predicting positive user responses to social media advertising: The roles of emotional appeal, informativeness, and creativity. *International Journal of Information Management*, 36(3), 360–373. <https://doi.org/10.1016/j.ijinfomgt.2016.01.001>
- Lee, N., Brandes, L., Chamberlain, L., & Senior, C. (2017). This is your brain on neuromarketing: Reflections on a decade of research. *Journal of Marketing Management*, 33(11–12), 878–892. <https://doi.org/10.1080/0267257X.2017.1327249>
- Lee, Y., & O'Connor, G. C. (2003). The Impact of Communication Strategy on Launching New Products: The Moderating Role of Product Innovativeness. *Journal of Product Innovation Management*. <https://doi.org/10.1111/1540-5885.t01-1-201002>
- Liu, G., Abolhasani, M., & Hang, H. (2022). Disentangling Effects of Subjective and Objective Characteristics of Advertising Music. *European Journal of Marketing*. <https://doi.org/10.1108/ejm-01-2021-0017>
- Lu, J., Liu, Z., & Fang, Z. (2016). Hedonic products for you, utilitarian products for me. *Judgment and Decision Making*, 11(4), 332–341.
- Luo, B., & Ranjan, B. (2025). EXPRESS: Mapping Spatial Heterogeneity in Retail Advertising Effectiveness. *Journal of Marketing Research*, 00222437251328601. <https://doi.org/10.1177/00222437251328601>
- MacInnis, D. J., & Jaworski, B. J. (1989). Information Processing from Advertisements: Toward an Integrative Framework. *Journal of Marketing*, 53(4), 1–23. <https://doi.org/10.1177/002224298905300401>

- Mars, M. M., Schau, H. J., & Thorp, T. E. (2022). Narrative Curation and Stewardship in Contested Marketspaces. *Journal of the Academy of Marketing Science*. <https://doi.org/10.1007/s11747-022-00904-4>
- Matthes, J., Wonneberger, A., & Schmuck, D. (2014). Consumers' green involvement and the persuasive effects of emotional versus functional ads. *Journal of Business Research*, 67(9), 1885–1893. <https://doi.org/10.1016/j.jbusres.2013.11.054>
- Miceli, M., Rosis, F. de, & Poggi, I. (2006). Emotional and Non-Emotional Persuasion. *Applied Artificial Intelligence*, 20(10), 849–879. <https://doi.org/10.1080/08839510600938193>
- Mizerski, R. W., & Dennis White, J. (1986). UNDERSTANDING AND USING EMOTIONS IN ADVERTISING. *Journal of Consumer Marketing*, 3(4), 57–69. <https://doi.org/10.1108/eb008180>
- Morhart, F., Malär, L., Guèvremont, A., Girardin, F., & Grohmann, B. (2015). Brand authenticity: An integrative framework and measurement scale. *Journal of Consumer Psychology*, 25(2), 200–218.
- Müller-Stewens, J., Schlager, T., Häubl, G., & Herrmann, A. (2017). Gamified Information Presentation and Consumer Adoption of Product Innovations. *Journal of Marketing*, 81(2), 8–24. <https://doi.org/10.1509/jm.15.0396>
- Nawaz, S., & Zahra, G. (2024). Impact of Perceived Insecurity Due to Portrayal of Women in Ads on Buying Behaviour. *Bulletin of Multidisciplinary Studies*, 1(1), Article 1. <https://doi.org/10.48112/bms.v1i1.759>
- Ndasi, W., & Akcay, E. E. (2020). Understanding Authenticity in Digital Cause-Related Advertising: Does Cause Involvement Moderate Intention to Purchase? *Westminster Papers in Communication and Culture*. <https://doi.org/10.16997/wpcc.344>
- Nowlis, S. M., Kahn, B. E., & Dhar, R. (2002). Coping With Ambivalence: The Effect of Removing a Neutral Option on Consumer Attitude and Preference Judgments. *Journal of Consumer Research*. <https://doi.org/10.1086/344431>
- Nunes, J. C., Ordanini, A., & Giambastiani, G. (2021). The Concept of Authenticity: What It Means to Consumers. *Journal of Marketing*, 85(4), 1–20. <https://doi.org/10.1177/0022242921997081>
- Olney, T. J., Holbrook, M. B., & Batra, R. (1991). Consumer responses to advertising: The effects of ad content, emotions, and attitude toward the ad on viewing time. *Journal of Consumer Research*, 17(4), 440–453.
- Otamendi, F. J., & Martín, D. L. S. (2020). The Emotional Effectiveness of Advertisement. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.02088>
- Padgett, D., & Allen, D. (1997). Communicating Experiences: A Narrative Approach to Creating Service Brand Image. *Journal of Advertising*. <https://www.tandfonline.com/doi/abs/10.1080/00913367.1997.10673535>
- Paharia, N., Keinan, A., Avery, J., & Schor, J. B. (2011). The Underdog Effect: The Marketing of Disadvantage and Determination Through Brand Biography. *Journal of Consumer Research*. <https://doi.org/10.1086/656219>
- Papadatos, C. (2006). The art of storytelling: How loyalty marketers can build emotional connections to their brands. *Journal of Consumer Marketing*, 23(7), 382–384. <https://doi.org/10.1108/07363760610712902>
- Papadopoulou, C., Hultman, M., & Oghazi, P. (2024). Authenticity Perceptions of Informational and Transformational Advertising: Decoding the Role of Construal Level Mindset. *Psychology and Marketing*. <https://doi.org/10.1002/mar.22153>
- Plakoyiannaki, E., & Zotos, Y. (2009). Female Role Stereotypes in Print Advertising. *European Journal of Marketing*. <https://doi.org/10.1108/03090560910989966>

- Rahmah, R., & Setiawan, M. (2023). Digital Marketing Strategy Wedding Planning Tools in Indonesia. *Arbitrase Journal of Economics and Accounting*. <https://doi.org/10.47065/arbitrase.v3i3.540>
- Rasmussen, K. (2021). Brand Activism and Gender: Nike as a Case Study. Brigham Young University. https://search.proquest.com/openview/78d4c613f5b1d7c9c0f7e5da9b06835b/1?pq-origsite=gscholar&cbl=18750&diss=y&casa_token=f62LmiCEdvIAAAAA:_InJA_NiJ0ymsN6T_IW_teEl7lgAR9kl_f_CGCzv-1VUO153k-jqVFeIySeuL4zKhSGLx1Ye0YQ
- Riska, E., & Heikell, T. (2007). Gender and Images of Heart Disease in Scandinavian Drug Advertising. *Scandinavian Journal of Public Health*. <https://doi.org/10.1080/14034940701349233>
- Rosengren, S., Eisend, M., Koslow, S., & Dahlén, M. (2020). A Meta-Analysis of When and How Advertising Creativity Works. *Journal of Marketing*. <https://doi.org/10.1177/0022242920929288>
- Roy, V., Tata, S. V., & Parsad, C. (2017). Consumer Response to Brand Involved in Food Safety Scandal: An Exploratory Study Based on a Recent Scandal in India. *Journal of Consumer Behaviour*. <https://doi.org/10.1002/cb.1666>
- Rozas, L., Busse, P., Barnoya, J., & Garrón, A. (2021). Data on Gender Representation in Food and Beverage Print Advertisements Found in Corner Stores From Guatemala and Peru. *BMC Research Notes*. <https://doi.org/10.1186/s13104-021-05469-z>
- Sattorov, A. (2024). Emotional Appeal as a Determinant of Effectiveness in English Advertising Texts: A Linguistic and Cognitive Analysis. *International Journal of Industrial Engineering, Technology & Operations Management*, 2(2), Article 2. <https://doi.org/10.62157/ijietom.v2i2.64>
- Saxena, G., Jain, S., & Mishra, S. (2023). Enhancing Affective Commitment Through Gamified Services of Luxury Brands: Role of Game Mechanics and Self-Congruity. *Journal of Services Marketing*. <https://doi.org/10.1108/jsm-06-2022-0217>
- Schlosser, A. E., & Shavitt, S. (2009). The Effect of Perceived Message Choice on Persuasion. *Journal of Consumer Psychology*. <https://doi.org/10.1016/j.jcps.2009.03.006>
- Shapoval, A. (2023). FUNCTIONING OF GENDER STEREOTYPES IN ENGLISH ADVERTISING DISCOURSE. *Humanities Science Current Issues*, 3(69), 190–195. <https://doi.org/10.24919/2308-4863/69-3-30>
- Shukla, A. (2023). Impact of emotional advertising on consumer purchase buying behavior in Delhi/NCR. *International Journal of Financial Management and Economics*, 6(1), 201–205. <https://doi.org/10.33545/26179210.2023.v6.i1.196>
- Shuqair, S., Pinto, D. C., Herter, M. M., & Mattila, A. S. (2024). Emojis as Heuristic Cues: The Multifaceted Role of Emojis in Online Service Interactions. *Journal of Consumer Behaviour*. <https://doi.org/10.1002/cb.2310>
- Siani, M. G., Mohammadi, S., Hosseini, M. S., & Dickson, G. (2021). Comparing young adult responses to rational and emotional sports product advertisements: The moderating role of product type and gender. *International Journal of Sports Marketing and Sponsorship*, 22(4), 798–815. <https://doi.org/10.1108/IJSMS-04-2020-0045>
- Sirgy, M. J. (2018). Self-congruity theory in consumer behavior: A little history. *Journal of Global Scholars of Marketing Science*, 28(2), 197–207. <https://doi.org/10.1080/21639159.2018.1436981>
- Sirgy, M. J., Grewal, D., Mangleburg, T. F., Park, J., Chon, K.-S., Claiborne, C. B., Johar, J. S., & Berkman, H. (1997). Assessing the predictive validity of two methods of measuring self-image congruence. *Journal of the Academy of Marketing Science*, 25, 229–241.

- Soti, R. (2022). The impact of advertising on consumer behavior. *World Journal of Advanced Research and Reviews*, 14(3), 706–711. <https://doi.org/10.30574/wjarr.2022.14.3.0577>
- Sterbenk, Y., Champlin, S., Windels, K., & Shelton, S. (2021). Is Femvertising the New Greenwashing? Examining Corporate Commitment to Gender Equality. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-021-04755-x>
- Stevens, L., & Ostberg, J. (2020). Gendered bodies: Representations of femininity and masculinity in advertising practices. In *Marketing Management* (pp. 359–373). Routledge. <https://www.taylorfrancis.com/chapters/edit/10.4324/9780203710807-27/gendered-bodies-lorna-stevens-jacob-ostberg>
- T. Kamalasena, B. D., & Sirisena, A. B. (2021). The Impact of Online Communities and E Word of Mouth on Purchase Intention of Generation Y: The Mediating Role of Brand Trust. *Sri Lanka Journal of Marketing*. <https://doi.org/10.4038/sljmuok.v7i1.58>
- Taute, H. A., McQuitty, Shaun, & Sautter, E. P. (2011). Emotional Information Management and Responses to Emotional Appeals. *Journal of Advertising*, 40(3), 31–44. <https://doi.org/10.2753/JOA0091-3367400303>
- Teichert, T., Hardeck, D., Liu, Y., & Trivedi, R. (2018). How to Implement Informational and Emotional Appeals in Print Advertisements: A Framework for Choosing Ad Appeals Based on Advertisers' Objectives and Targeted Demographics. *Journal of Advertising Research*, 58(3), 363–379. <https://doi.org/10.2501/JAR-2017-054>
- Villanueva, J., González, J., & Armelini, G. (2019). The Complementary Role of Advertising and Electronic Word-of-Mouth for Blockbusters and Low-Budget Motion Pictures. *International Journal of Internet Marketing and Advertising*. <https://doi.org/10.1504/ijima.2019.10019166>
- Viswanathan, M., Rosa, J. A., & Harris, J. E. (2005). Decision Making and Coping of Functionally Illiterate Consumers and Some Implications for Marketing Management. *Journal of Marketing*, 69(1), 15–31. <https://doi.org/10.1509/jmkg.69.1.15.55507>
- Wang, B., & Li, Y. (2022). Consumers' Intention to Bring a Reusable Bag for Shopping in China: Extending the Theory of Planned Behavior. *International Journal of Environmental Research and Public Health*, 19(6), Article 6. <https://doi.org/10.3390/ijerph19063638>
- Wang, J., Dang, W., Hui, W., Muqiang, Z., & Qi, W. (2021). Investigating the Effects of Intrinsic Motivation and Emotional Appeals Into the Link Between Organic Appeals Advertisement and Purchase Intention Toward Organic Milk. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.679611>
- White, A., Breazeale, M., & Collier, J. E. (2012). The Effects of Perceived Fairness on Customer Responses to Retailer SST Push Policies. *Journal of Retailing*, 88(2), 250–261. <https://doi.org/10.1016/j.jretai.2012.01.005>
- Yan, L., Keh, H. T., & Murray, K. B. (2024). Feeling the values: How pride and awe differentially enhance consumers' sustainable behavioral intentions. *Journal of the Academy of Marketing Science*, 52(1), 75–96. <https://doi.org/10.1007/s11747-023-00928-4>
- Yao, D., Zhu, Z., & Guo, W. (2025). The Impact of Advertising on Women's Self-Perception: A Systematic Review. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2024.1430079>
- Yaseen, S., Mazahir, I., & Ramish, M. S. (2022). Exploring the role of emotional intelligence in advertising: A theoretical analysis. *International Journal of Media and Information Literacy*, 7(1), 272–279.
- Yeung, C. W. M., & Wyer, R. S., Jr. (2004). Affect, Appraisal, and Consumer Judgment. *Journal of Consumer Research*, 31(2), 412–424. <https://doi.org/10.1086/422119>

- Yoon, D.-H., & Kim, Y. (2015). Effects of Self-Congruity and Source Credibility on Consumer Responses to Coffeehouse Advertising. *Journal of Hospitality Marketing & Management*. <https://doi.org/10.1080/19368623.2014.1001932>
- Young, C., Gillespie, Brian, & Otto, C. (2019). The Impact of Rational, Emotional, And Physiological Advertising Images On Purchase Intention: How TV Ads Influence Brand Memory. *Journal of Advertising Research*, 59(3), 329–341. <https://doi.org/10.2501/JAR-2019-010>
- Zarantonello, L., Jedidi, K., & Schmitt, B. H. (2013). Functional and experiential routes to persuasion: An analysis of advertising in emerging versus developed markets. *International Journal of Research in Marketing*, 30(1), 46–56. <https://doi.org/10.1016/j.ijresmar.2012.09.001>
- Zawisza, M., & Cinnirella, M. (2010). What Matters More—Breaking Tradition or Stereotype Content? Envious and Paternalistic Gender Stereotypes and Advertising Effectiveness. *Journal of Applied Social Psychology*, 40(7), 1767–1797. <https://doi.org/10.1111/j.1559-1816.2010.00639.x>
- Zhang, H., Sun, J., Liu, F., & Knight, J. G. (2014). Be Rational or Be Emotional: Advertising Appeals, Service Types and Consumer Responses. *European Journal of Marketing*. <https://doi.org/10.1108/ejm-10-2012-0613>
- Zhang, Y.-L., Zhang, H.-M., Xu, J.-X., Zhou, Q.-Y., Wang, H., & Pan, X.-C. (2024). Survey and clinical considerations of gender identity in lower primary school children. *World Journal of Psychiatry*, 14(1), 36–43. <https://doi.org/10.5498/wjp.v14.i1.36>

Appendix A



Appendix B

Measurement Scales

Purchase Intention

Purchase intention is the dependent variable, measuring the likelihood that a consumer will buy the product (Han, Hwang, and Lee, 2017). The following items assess this intention:

- PI 1: I will recommend this product to others
- PI 2: I am willing to buy this product.
- PI 3: I will make an effort to buy this product.

Positive Word of Mouth

This scale is adopted from Brüggen et al. (2011). The following statements were given to measure the positive word of mouth:

- PWOM1: I am likely to say positive things about this product to other people
- PWOM2: I am likely to recommend this product to a friend or colleague.
- PWOM3: I am likely to say positive things about this product in general to other people
- PWOM4: I am likely to encourage friends and relatives to purchase this product.

Negative Word of Mouth

This scale was adopted from White et al. (2012). The following items were included in the survey to measure the negative word of mouth behavior.

- NWOM1: Based on the ad, I would likely say negative things about this product
- NWOM2: Based on the ad, I would not recommend this product to my friends and relatives.

Self-Image Congruency

This scale was adopted from Sirgy et al. (1997). The following items construct this scale.

- SIC1: The ad is consistent with my self-image
- SIC2: The ad reflects who I am
- SIC3: The ad is highly consistent with how I see myself

Emotional Engagement

Emotional engagement reflects the extent to which an advertisement resonates with an individual on an affective level (Olney et al., 1991). The following items measure emotional engagement:

- EE1: I felt emotionally connected to this advertisement.
- EE2: This advertisement made me feel excited
- EE3: This advertisement made me feel happy
- EE4: This advertisement made me feel sentimental
- EE5: The advertisement captured my attention
- EE6: The advertisement kept me engaged
- EE7: I felt personally involved while watching this advertisement.
- EE8: The advertisement evoked strong positive emotions in me
- EE9: The advertisement evoked strong negative emotions in me

Perceived authenticity

This scale was taken from (Morhart et al., 2015).

- PA1: This advertisement felt genuine and truthful.
- PA 2: The message in the advertisement seemed honest and not exaggerated.
- PA 3: The advertisement made me trust the brand's values and intentions.
- PA 4: The product or brand in the advertisement appeared to be sincere and authentic.
- PA 5: This advertisement did not feel overly promotional or misleading.

Full Paper

Balancing Acts: The Market Potential of Emotionally Intelligent Products to Resolve Consumer Paradox

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In the emotionally charged context of neonatal intensive care, parents face paradoxical dilemmas, simultaneously desiring mutually exclusive conditions such as autonomy Vs. oversight. This paper explores how parents of NICU infants experience the transition from hospital to home, revealing a consumer paradox: longing for the freedom of home while fearing the loss of medical monitoring. Integrating Heider's balance theory and paradox theory, we demonstrate how a consumer product, the Owlet monitoring sock, resolves this tension by functioning as a "balancing object" that harmonizes contradictory desires. Drawing on a qualitative study of NICU parents and a conceptual case analysis, we show how consumer paradox can be a market opportunity, and how emotionally intelligent products can mediate paradoxes of identity, safety, and competence. We contribute to marketing theory by reframing paradox as fertile ground for innovation, and we resurrect balance theory as a diagnostic tool for identifying opportunities for emotionally intelligent design.

Key words: Neonatal intensive care unit (NICU); Paradoxical consumption; Paradox theory; Heider's balance theory; Medical monitoring devices

INTRODUCTION

Each year, approximately 10% of infants born in the United States, the UK, and Europe are admitted to neonatal intensive care units (NICUs) or special care nurseries. While some infants have prolonged hospitalizations, the majority are less seriously ill, and are able to go home within two weeks, medically stable, and without lasting complications. During this transition, parents see the removal of medical support as signs of recovery, somewhat like progress markers on the path toward the new baby being finally at home, cozy in the home nursery. Ventilators, feedings tubes, and IVs are disconnected with celebration.

But one technology resists this celebratory narrative: the physiological monitor. The same parents who had anxiously looked forward to the removal of each medical device often experience unexpected anxiety when the monitors that keep track of heart rate, respiration, and oxygen saturation are removed. These monitors and their associated alarms, once a symbol of crisis, are now seen as a source of reassurance and safety. The idea of being at home without any wires or medical equipment, once idealized, now is felt as vulnerability. Parents face a paradoxical dilemma where they yearn to have the baby at home, free and unfettered from ties to the medical context, but they want the certainty and vigilance of that medical context.

We frame this emotional dilemma through Heider's balance theory, which describes how individuals strive to maintain consistency among their beliefs, behaviors, and emotional states. In this case, the triadic structure looks like this: the parent values the home (P-O), the parent values medical monitoring (P-X), but the home and the hospital-grade monitors are perceived as mutually exclusive (O-X). This paradoxical dilemma creates space for an innovative consumer product: a home-based, wearable infant monitor designed as a soft, wireless sock. Unlike hospital monitors, it is domestically situated, aesthetically gentle, and emotionally acceptable in a home nursery setting. It does not replicate the full clinical precision of institutional technology, but that is not the point. Its market value instead lies in its ability to balance the function of being a "good enough" monitor, while also being a sensitive, gentle addition to the home nursery. It functions as a balancing object, restoring harmony in a triad of conflicting desires: the need for safety, the longing for autonomy, and the aesthetic-emotional logic of "home."

The logic of balancing objects aligns with other patterns seen in the marketing literature in categories where paradoxes drive demand. For example, "masstige" (a portmanteau of "mass" and "prestige") arises to address the contradiction between aspirational status and financial constraint. SUVs balance the contradiction between

comfortable family hauler and the image of ruggedness and readiness for adventure. These products, like the monitor, represent a compromise market solution: a product that succeeds not because it outperforms alternatives in all aspects, but because they offer functional, emotional, and symbolic resolution to incommensurable consumer desires and demands.

The significance of this case extends well beyond the neonatal context. It illustrates a larger, underexplored market opportunity: the development of products that resolve paradoxical consumer needs, especially in domains where emotions, identities, and institutional power intersect. Health-related consumer goods, particularly in the rapidly growing direct-to-consumer medical technology sector are ripe for such innovation. From at-home diagnostic tests to wearable biosensors, we are witnessing the rise of a market logic that does not merely fill gaps in care delivery, but that actively mediates psychological and symbolic tensions.

Theoretical treatments of this emerging domain remain sparse. We argue that consumer paradoxes, far from being barriers, can function as innovation catalysts, opening new white spaces for firms that can recognize and resolve internal dissonance. Products that restore symbolic and emotional balance with adequate functionality are not substitutes for clinical care, they are extensions of meaning systems that help consumers balance their conflicting desires.

This paper contributes to research on health-related innovation, offering a framework for identifying fertile terrain for market entry: that is, not just where there is unmet need, but where there is unresolved paradoxical tension. The most successful innovations in these spaces will not be those that maximize performance on traditional metrics but those that restore equilibrium in the customer's cognitive and emotional ecosystem.

BACKGROUND

The time of birth is a momentous transition for parents, full of cultural scripts and logics that have been created and ingrained over generations by traditions of cultural and family lore, personal experience, entertainment tropes, and advertising and marketing. In concert with popular books like *What to Expect When You're Expecting* (Murkoff 2016), many expectant parents prepare for the new baby with common consumer behaviors: acquiring baby clothes and infant paraphernalia, making birthing plans, buying and learning how to use car seats and strollers, and preparing the nursery (Afferback et al 2014; Carrigan and Szmigin 2004; Thomsen and Sorenson ; Freitas et al 2024; O'Donahue et al 1999; Taylor et al 2004; Theodorou and Spyrou 2013). In concert with this consumption, parents imagine themselves holding their newborn and bringing their new baby home in accordance with traditional and changing family narratives (Ex and Janssens 2000; Sanders et al 2023; Gurtin and Faircloth 2018).

A significant percentage of babies do not follow the expected script due to health issues that result in admission to the neonatal intensive care unit (NICU) (Braun et al 2020; Caporali et al 2020). Between 7-10% of babies born annually in the UK, EU, and US will need a NICU stay. Nearly 1 in 10 infants were admitted to a NICU in the United States in 2023, representing an increase from 8.7% in 2016 to 9.8% in 2023 across all demographic groups of mothers (Martin and Osterman 2025). In the UK, this number is around 90,000-100,000 babies (1 in 7) born annually (Royal College of Paediatrics and Child Health 2017). This is a surprisingly high number of cases where the previously-imagined narrative of birth, baby, parenthood, and family is disrupted.

While clinical advances have dramatically improved survival rates for the newborns who require special care or an NICU stay after birth, the emotional and psychological toll on parents remains substantial (Flacking 2012). NICUs are emotionally charged environments with ever-present vigilance, uncertainty, and clinical oversight. Parents find themselves thrust into medical roles while navigating the fragility of a premature or medically complex infant (Flacking 2012). When the time comes for discharge, families must shift from a highly monitored environment with continuous physiological surveillance and medical expertise to the relatively unstructured domain of home caregiving.

This leads us to our research question: Can direct-to-consumer solutions resolve the parental paradox of wanting both the safety of the NICU and the normalcy of home and nursery?

LITERATURE REVIEW

Consumers frequently engage in paradoxical behavior, simultaneously pursuing contradictory goals, values, and emotional orientations (Mick and Fournier 1998; Luedicke, Thompson and Giesler 2010). These contradictions

are not cognitive flaws, but enduring features of the consumer experience. In organizational behavior, paradox theory has given rise to the concept of “both/and” rather than “either/or” thinking (Smith and Lewis 2011), whereby paradox is not simply tolerated or eliminated, but is sometimes productively embraced. When consumers work to reconcile competing systems of meaning (e.g. tradition vs. innovation, naturalness vs. convenience) they often attempt to find both/and solutions in the marketplace, and this paradoxical decision making is especially pronounced in contexts where consumption intersects with institutional authority and emotional risk (McAlexander et al 2014; Carrington Neville and Whitwell 2014).

Mick and Fournier’s work on the paradoxes of technology identify tensions of freedom vs. control, and engagement vs. detachment (1998), and Llamas and Belk (2013) describe the dual desire for autonomy and expert authority. Lupton (2014) and Lupton and Maslen (2018) show that consumers adopting health technologies often do so not purely for informational gain but also to manage emotional uncertainty while negotiating their relationship with institutional medicine.

Such contradictions give rise to products that function not by eliminating paradox but by symbolically managing it. Holt (2002) talks about sites where conflicting discourses are made temporarily compatible through market mediation, and direct-to-consumer health technology (e.g. wearables, diagnostic kits) appear to exemplify this. These products allow consumers to balance opposing logics without having to resolve them fully.

Marketers and entrepreneurs have benefited from recognizing consumer paradox as a productive design challenge with compromise market solutions, that is, products of that offer “both/and” rather than “either/or” value propositions. Masstige (Silverstein and Fiske 2003; Truong et al 2009) allows consumers to access prestige cues without luxury prices, Processed foods labeled as USDA Organic merge convenience with assurances of naturalness. This suggests that consumer paradox is a source of market opportunity. Paradox opens new terrain for innovation that addresses emotional, symbolic, and identity- and affective- based contradictions rather than just unmet functional needs.

Few frameworks capture how consumer paradox is felt, narrated, and symbolically resolved. Existing models emphasize awareness of paradox, but not its navigation in affective and symbolic terms. This sets the stage for our use of Heider’s balance theory with a micro level model of emotional structure and symbolic realignment. Heider’s balance theory (1958) posits that individuals seek affective consistency across triadic relationships, typically involving a perceiver (P), an object (O), and a third reference (X). When these elements are misaligned (e.g. P likes O, P likes X, but O and X are in conflict), the resulting imbalance creates cognitive dissonance prompting the individual to cognitively or symbolically realign the triad.

Balance theory was foundational to early attitude theory (Fishbein and Ajzen 1975) but it has seen limited application in contemporary marketing. Nevertheless, it provides a precise mechanism for understanding symbolic resolution in emotional contexts. Early research applied the model to brand-consumer-endorser triads (Roy et al 2012; McDaniel 1999; Mowen 1980), co-branding (Manrai et al 1997) and triadic supply chains (Phillips et al 1998). In each case, balance theory helps explain how consumers integrate or reject offerings based on emotional congruence across meanings.

Despite these contributions, balance theory remains underutilized. In our context, balance theory holds promise. Parents do not merely weigh pros and cons, they strive to integrate conflicting emotional and symbolic demands (e.g. to be autonomous and supported, to be empowered and safe). In these contexts, products can function as balancing objects that symbolically and functionally reconcile incommensurable positions. A consumer-grade infant monitor for example, may not offer clinical reliability, but it may enable a parent to restore symbolic equilibrium, affirming both their caregiving competence and their longing for reassurance. The value is both in utility AND in affective alignment.

Used in conjunction with paradox theory, balance theory offers insight for innovation. While paradox theory identifies the condition (persistent tension between incommensurable desires/needs), balance theory explains consumer demand for products that make such tension livable. It is also compatible with insights from cognitive dissonance theory (Festinger 1957), but it brings greater attention to symbolic triangulation and relational harmony, rather than internal belief conflict alone. Balance theory offers an interpretive framework for studying how

consumers enact emotional regulation through product adoption, practice, and narrative reframing. This makes it valuable in emotionally high-stakes, symbolically dense consumption contexts like neonatal care.

Although balance theory has limited empirical validation and has been seen as over-simplification (see Woodside and Chebat 2001 for an empirical defense against these claims), and many consumer contexts have a more complex network than the triadic one offered, balance theory is uniquely suited to the empirical context of this study. The NICU-to-home transition presents a clear triadic tension. Parents (P) value both the home (O) and clinical monitoring (X), yet O-X are perceived as incompatible. The resulting imbalance is not solely rational but also affective and identity-based. The use of a nursery-compatible, consumer-grade monitor symbolically realigns the triad, restoring coherence.

Balance theory helps us interpret this behavior not as utility maximization, but as a symbolic reframing of care, safety, and competence in emotionally acceptable terms. Used as a midrange theory, it offers not only a useful lens for examining how consumers restore balance through emotionally intelligent consumption, but also how entrepreneurs and marketers can use these insights to develop marketplace solutions for consumers.

METHODS

This study employs a multi-method qualitative design, integrating depth interviews with NICU parents and staff to understand the lived experience of the emotional paradox in the transition from hospital to home, and a theoretical case study of a consumer health technology product (the Owlet monitoring sock) that exemplifies a market response to those paradoxes. Together, these methods allow us to examine how paradoxical consumer needs are experienced expressed, and symbolically resolved through both narrative and product form.

We conducted in-depth semi-structured interviews with 24 parents (19 mothers and 5 fathers) of infants admitted to neonatal intensive care units in the US and in Finland. Participants were recruited using purposive sampling, beginning with those known to the authors and extending via snowball sampling and referrals. Inclusion criteria required that participants had an infant admitted to an NICU for at least five days and were willing to reflect on both their hospital and post-discharge experiences.

For purposes of triangulation and contextualization, we extended the sample through referrals to other people with NICU experiences. Our theoretical sampling extended to parents with any type of NICU experience from short to extended stay. Also beginning with personal networks, we have recruited NICU staff members, including neonatologists, neonatal nurses, neonatal respiratory therapists and a pediatric clinical psychologist. These we interviewed over periods of one hour to twelve hours with multiple interviews. We have coded and analyzed interviews from the various subject positions and with special attention to materiality, discursive strategies, and emotional experiences.

Data Source	Informant Role	#	Location		Analysis
Depth interviews, in situ interviews, and observations	Parent	24	In-home, in-NICU, video conference, phone, third-spaces		Recorded, transcribed verbatim, coded for first order and second order codes by authors, NVivo entry, hermeneutic analysis by authors
	Neonatologist	3	Invited NICU tours, NICU ethnography, neonatal conferences		
	Respiratory /occupational therapist	5			
	Nurse	10			
	Clinical psychologist	1			
Authors' experience	NICU RRT	1	Personal knowledge/ Experience		Background to inform study
	NICU parent	2			

Contexts and Recruitment

We began our data collection in a highly exploratory mode, relying on personal networks for interviews. As a result, early interview contexts varied from informant's homes to coffee shops to phone and video-conferencing applications. Guided by early data analysis, we expanded the study to include more formal medical contexts.

Working closely with a leading neonatologist in Finland, we were granted access to numerous medical professionals across multiple countries with a wide range of economic and regulatory characteristics. These relationships led to invitations to visit and observe NICUs in Finland (2), Estonia (1), Sweden (1), the USA (1), and India (2 private, 1 public). While we focused our data collection primarily on parents and their experiences, our extensive conversations with health-care providers at every level offered rich opportunities for triangulation and cultural calibration of our emergent findings.

By way of invitation to a major children's hospital and research center in the American Midwest, and with ethics approval for parent interviews at third spaces, we conducted semi-structured interviews in private homes and in quiet, third-space areas. Research participation came first through referrals by the head neonatologist, with a snowball sampling that grew as the study progressed. The interviews involved mothers with previous, as opposed to current, NICU stays. The in-home interviews were strengthened as parents spontaneously brought out collected paraphernalia, photos, and keepsakes from their NICU experiences.

With medical ethics approval from a Finnish research hospital, we conducted a thirty-day period of intensive participant observation in its NICU. Assisted by a bilingual medical student in cases where parents lacked comfort with English, we conducted formal and informal interviews with parents, both mothers and fathers. We followed all ethical protocols for voluntary participation and were extremely careful to respect the wishes and feelings of the participating parents. All these interviews we conducted in the NICU, either at the infant's bedside or in a breakroom. Some parents were near-constant denizens of the NICU. Others visited regularly but for shorter periods. Conversations with staff members added perspective to the parent interviews and their personal situations.

Our US and Finnish studies, separate in time, location, and governing ethical standards and bodies, differed on many dimensions, including informant profiles. US informants were all mothers with past NICU experiences that were both prolonged and successful. The Finnish sample, recruited in situ, included both mothers and fathers of infants currently being treated in the NICU. The two sites also differed in other meaningful ways rooted in cultural, political, and economic particularities. The differences combined to make the samples non-comparable in many ways. Despite extreme differences in context and sample, our analysis uncovered common and unifying themes which transcended the differences.

Over the course of our entire research program, we engaged regularly with neonatal medical professionals and scholars. We attended and participated in three international NICU-related academic conferences. By invitation, we visited NICUs, conducting informal interviews and discussions with key medical personnel, in the previously named countries. This broader contextual engagement, on top of our own NICU experiences as parents and, in the case of the first author, as an NICU respiratory therapist and medical researcher for several years, gave us an informed position from which to analyze and compare our findings.

Data Analysis

We began our data collection and analysis in the USA with the objective of understanding of how NICU design and management – creating a high-stakes, high-technology, and high-stress service environment – presents barriers to parent-infant bonding. That early analysis was guided by assemblage theory, with a focus on the territorialization and coding of overlapping assemblages. The emergence of consumption as an important phenomenon forced us into an inductive and iterative mode, generating themes and concepts from our data without preconception or guiding frameworks.

Holding our emergent findings from the American context loosely, we moved our focus to Finland, where we were granted ethnographic entrée to the NICU of a major research hospital. This allowed us to observe parental consumption practices in real time and to probe the meanings of those practices through in-situ interviews. Through a combination of constant comparative analysis (Glaser and Strauss 1967) and hermeneutic analysis (Arnold and Fisher 1994) we coded our data in increasingly aggregated and abstract categories, developing and testing themes, identifying boundary conditions, and ultimately theorizing parental consumption in the NICU.

Case Study

Many parents described an emotional paradox of wanting to leave the NICU while still desiring the safety of the constant monitoring. This resonated closely with the Owlet sock monitoring product's stated purpose and positioning. Researching the Owlet sock as a conceptual case (Stake 1995; Yin 2018), we saw that consumer testimonials and forum posts reflected the sentiments of paradox expressed by our informants. While none of the parents in our sample used or referenced the Owlet (the product came out after our interviews were conducted), we selected the Owlet sock as an example of how the marketplace can respond to emergent, emotionally complex consumer needs through symbolic innovation. The case study is not intended as a representative reflection of participant behavior, but rather as a market artifact that illustrates how entrepreneurial actors interpret, design for, and capitalize on consumer paradox.

The Owlet case allows us to bridge theory and practice connecting affective experiences voiced in our empirical data to a product that seeks to functionally and symbolically resolve those contradictions. It provides an analytic opportunity to explore how consumer paradox in a caregiving and health-related context can lead to product innovation and emotionally intelligent design.

To construct the Owlet sock case, we analyzed a range of secondary data sources including over 200 user testimonials and product reviews published on the company's official website and third party retail platforms, publicly available Reddit threads and parenting forums, interviews and media appearances featuring the company's founders. Owlet's founders have themselves felt parental anxiety over their newborns, experiences that were also common among their networks of friends and relatives. They have explicitly described their product as a response to that experience. Finally, we examined product marketing materials, user guides, and visual design features, which we analyzed as symbolic artifacts.

These materials were qualitatively coded to extract themes related to emotional positioning, symbolic alignment, perceived utility, and role in resolving paradoxical needs (e.g. freedom Vs. safety; natural caregiving Vs. medical oversight).

Analytic Approach

Our analytic strategy is interpretive and theory-building (Thompson 1997; Gioia et al 2013). We used the NICU parent interviews to surface key consumer paradoxes, then interpreted how the Owlet sock mediates these paradoxes through its material, symbolic, and affective design. Heider's balance theory (1958) serves as the conceptual framework through which we map the consumer tension and mechanisms of symbolic resolution. Rather than seeking generalizability, our aim is theoretical and practical insight toward new categories of innovation that address unresolved contradictions with emotionally intelligent design.

FINDINGS

Good News, Bad News: The NICU-Release Paradox

Parents whose babies have just arrived in the NICU describe a soundtrack that falls like the noises of a foreign country's streets on uncomprehending ears. The medical acronyms, the beeping, chiming, flashing cacophony of alarms, the overhead pages, the hiss of ventilators, and the purposeful and urgent movements of people are overwhelmingly unfamiliar. They find themselves separated physically by a seemingly-huge clear plastic warming isolette, often with ropes of tubing and lines attaching their baby to life-giving air and nutrients. The child they've looked forward to welcoming into their family looks frighteningly entwined with the technology that is keeping them alive. The monitors they're attached to, with their random and ominous-sounding alarms, are associated with medical and familial crisis.

Parents of babies in the NICU learn early on that one of the most important things being monitored is how the baby is breathing. The presence and rate of apnea spells (cessation of breath for an unusually long period of time), bradycardia spells (slow heart rate), and desaturations (decreases in blood-oxygen saturation) and tachycardia (increased heart rate), are key indicators of the baby's status and medical stability. Parents themselves begin to monitor these vital signs, and learn the medical language to talk about them:

Finally it got to the point where I could understand the language. It was like learning French. Desats, bradycardia, tachycardia, A's and B's...Then I could be there for rounds and participate. I was part of the team. (Marianne, US)

Parents in the NICU must live day-to-day without a clear end point, often having no idea when their babies will be "set free" from the bounded confines of the NICU. They exhibit many aspects of "service captivity" (Rayburn et al 2020; Wilson-Nash 2022). One informant related:

Aaron was doing well. He wasn't even on oxygen anymore and had only one IV in his little hand for antibiotics. My husband and I got to actually carry him BY OURSELVES (emphasis informant) to the parent lounge, with no nurses or anyone going with us! But we had no idea when he would be released and when we could take him home. At one point, we were in the hallway looking at the door to the parent lounge on one side, and the big double doors to exit the NICU on the other. We looked at each other and stood there and my husband finally said, "Should we make a run for it?" I started laughing because truly that was like all I was thinking, too. We wanted to take Aaron and escape that place. We didn't, of course. We were trapped. (Sandy, US)

Even so, as the time approaches for their babies to be released to home, many parents realize they have come to value and depend on the monitoring and safety the NICU gives them. The time of release often triggers feelings of ambiguity, especially for parents that haven't given much thought or planning to the transition home:

<The doctor> was here on Thursday when we were discussing it for the first time and I was kind of scared, I got, like, I was actually like, I was shocked that it was even an option. From the beginning I have been like, in the mindset that we are going to be here for a while, I am not in a hurry to go home, we are going to be here for as long as we need to. Because if I start hurrying, then my mood sinks every time I notice that okay, well we did not get home today, so, it is much easier for me to just assume that we are going to be here for a while. So I was quite shocked when the subject about going home was brought up.

Parents find themselves surprised at how attached they have become to the surveillance of both nursing staff and monitor technology:

Dad: I think after we get home I probably miss this place for a while.

Interviewer: What do you think you'll miss?

Dad: I think the absolute security. That I can call some, I can push a button when I feel insecure about something. I can't do that at home. Of course I can pick up a phone there but, still it is not quite the same because they won't come to check out the situation, they'll just tell me on the phone what to do.

Part of the transition anxiety comes from pre-mourning the loss of the human relationships in the NICU:

Interviewer: How did you feel about leaving the hospital?

Mom: I.. It was sad. You know when you do the same thing over and over again every day, where even though I was ready to not be going back and forth every day to the hospital, it felt – it was a transition for me to not be going to the hospital. The last two days of going back to the hospital, I just sobbed.

Interviewer: What were you going to miss?

Mom: The support of so many people. Even though we had the support of our families, just this huge group. The resources of them-bouncing things off of them, asking them about this. Our primaries I just loved and still stay in contact with and they're just... they're like family members. So, not seeing them all the time... And they had shared so much of their lives with us. Even though I wanted the girls to be able to come home! <Evie> was

already home. But even though I wanted <Annie> to come home, this was a big part of my life for three months. It wasn't going to be a part of my life anymore. ... That's so weird to me that I would think that, because I wanted <Annie> home! <I would think> 'All of these people are coming and going and Annie's still here. Why can't I have my baby at home, too? Why does this have to take so long?'

Parents related the way the monitors had become an integral part of their feelings of security and safety in the NICU:

Usually, when I wake up, and she is not doing anything, the first thing I do is I look at the monitors. So that is going to be something I miss at home in a way! I don't have any definite proofs that everything is fine. But I am pretty sure I am going to learn to notice from her is everything is ok.

The monitors become emotional surrogates for safety and rituals of care. They shift from a symbol of crisis to one of stability and well-being. The parents long for home, and the cozy nursery they've prepared. They do not, however, want to give up the security of the monitors that assured them all was well.

The stress occasioned by these conflicting desires was addressed as a market opportunity by the founders of a company called Owlet. The first Owlet product came to market in October 2015, too early for any of our parent informants to be aware of it. To see how it addresses the paradox and imbalance we identified, we use the company web site, company-hosted parent testimonials, and Reddit posts by parents about the Owlet products.

From Paradox, Opportunity: The Owlet Dream Sock as a Balancing Object

Although discharge is framed by both clinicians and parents as a moment of triumph, many parents also experience it as a time of anxiety with the sudden withdrawal of institutional safety nets and a heightened sense of individual responsibility. Parents are faced with the dilemma of exiting the place they've come to regard as a safe place that saved their baby's life and continues to keep it alive and well. They start to become aware that the burden of responsibility of the infant's health and safety will now fall upon them. Furthermore, they realize they will have to fill that caretaker role without the monitoring equipment they have come to rely on for information about their baby's health condition. Some parents in this position turn to the market and look for direct-to-consumer monitoring equipment.

The Owlet Dream Sock, a soft, pastel-colored, adjustable bootie with a hidden sensor to measure oxygenation (oxygen saturation) and pulse, that alarms when either is below a certain threshold (Figure 1), was developed by Kurt Workman. When interviewed by Mom's Choice Awards for receiving their annual award, Workman said:

I was inspired to start Owlet in 2012, when my wife and I were starting our own parenting journey. My wife was actually born with a genetic heart condition, which went undiagnosed at the time, and we were concerned our children would also be impacted. When my wife was an infant, she nearly passed away during her sleep from the condition. Her mother checked on her and found her blue, not breathing, having gone into cardiac arrest. She was rushed to the hospital for lifesaving surgery. In my early teens, I also lost a baby cousin to sudden infant death syndrome (SIDS). His death had no explanation and that never settled well with me. In the age of technological advancements in today's society, it was utterly shocking to me – even as a teenager – that there wasn't a better way to care for our babies.

I believe that every family deserves the peace of mind that comes from having insights into their baby's health from the home, and I decided to dedicate my life to creating the technology needed. I teamed up with a group of my college friends to create a prototype wearable sock monitor that tracked Baby's heart rate and oxygen level. Ten years later and many successes and some failures, we now have set a totally new standard for infant health monitoring. Dream Sock received a De Novo clearance from the FDA, meaning we set an entirely new category and are holding the industry to the highest standards. We were the first in the category and continue to push ourselves to provide the best care for babies. (Mom's Choice Awards 2024)

Although not marketed specifically to NICU parents, the Dream Sock was an emotionally intelligent solution that balanced the paradoxical misalignment parents faced between wanting to be at home in their cozy nursery, but wanting the health monitoring security they had in the NICU. The Dream Sock didn't replicate the

NICU, but symbolically substituted its key affordances, that is, by monitoring for A's and B's (apneas and bradycardias), the tracking of which parents had learned was of paramount importance to judge their infant's status, it provided feelings of security and safety, and while eliminating cords, wires, and medical-appearing equipment.

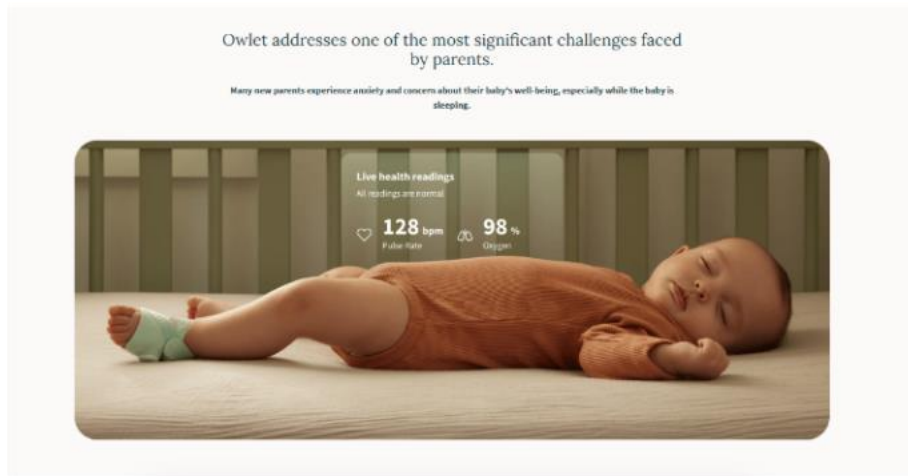


Figure 1: From owletcare.com

The company web site tells parents that the Dream Sock lets parents “know when you’re needed” (Figure 2). When a parameter is outside the boundaries set, the app associated with the Owlet prompts parents to “Check on Baby: Is Baby breathing normally? Is Baby’s skin color normal? Is Baby alert and responsive?” and then “If you answered ‘no’ to any of the above, or are concerned about Baby, please seek medical attention.”

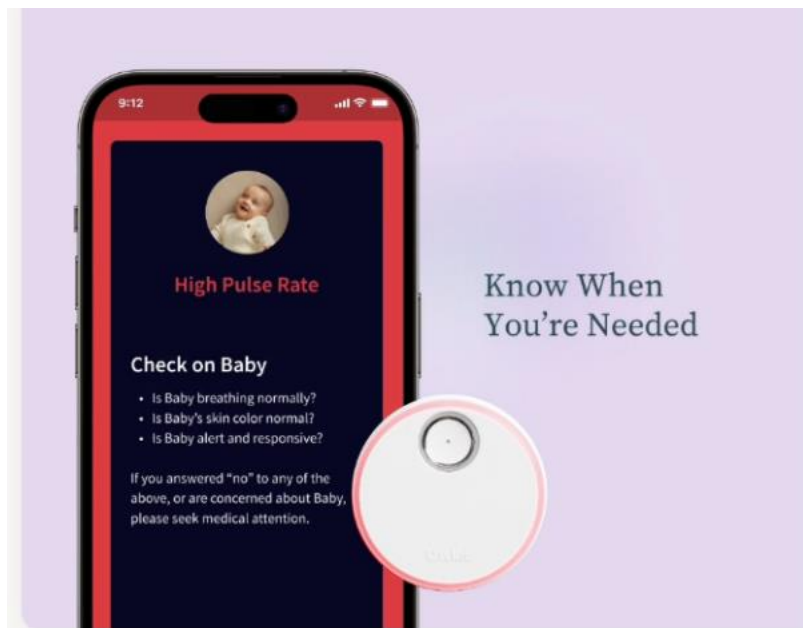


Figure 2: From owletcares.com

The Owlet site has numerous parent testimonials, including the three in Figure 3 highlighting the importance the Owlet has played in alerting them to times when their babies had instances that needed medical intervention.

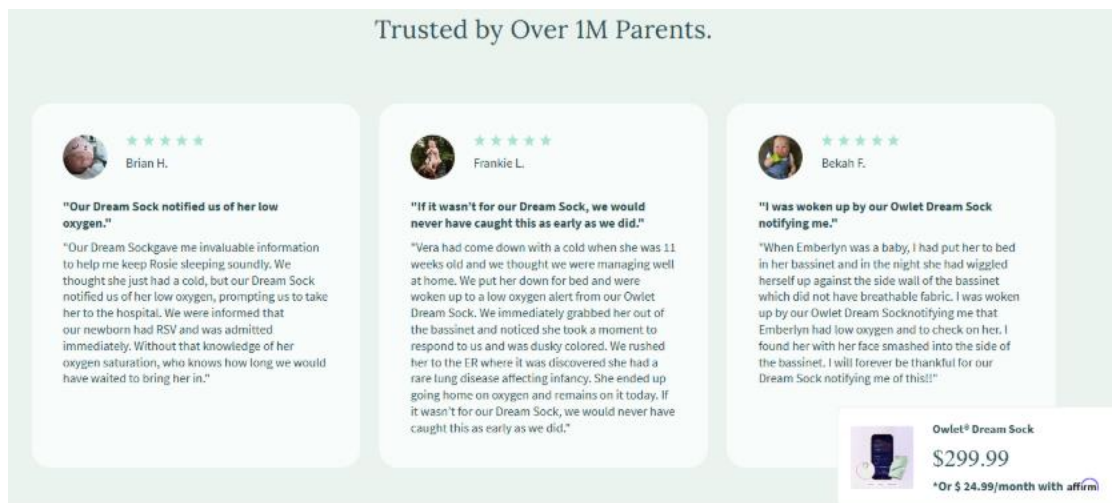


Figure 3: From Owletcares.com

Below are representative quotes from parent testimonials available on the Owlet site and listed in the references with the umbrella page of the Owlet Blog Stories (Accessed June 2025). They are linked to the full testimonial also publicly available on the Owlet site. Note that these testimonials speak to the comfort, peace of mind, and relief felt by the parents from this market solution. Note that the parents speak not to the technical aspects, but to how it made them feel.

“This product is amazing and gives us such peace of mind! We can rest assured knowing that we will be alerted if there’s reason for concern. Newborn parenting is hard enough, so this extra sleep is great”

“Before the pulse ox would be in the nursery and so the alarm would be right next to the baby, and us parents would have to get up and go look at the pulse ox to see what the numbers were. Now with BabySat, we can see the numbers from our phones and the alarm doesn’t have to disturb our daughter.”

“we bought our Owlet Dream Sock to have peace of mind and access to her pulse rate and oxygen. At around one month old, Scottie got sick with rhinovirus and our Dream Sock alerted us to her critically low oxygen level, prompting us to take her to the emergency room to be evaluated. It was discovered she was experiencing apnea causing bradycardia and low oxygen levels due to the rhinovirus.”

“Because of our Dream Sock I was able to know my child needed emergency care before his outward symptoms became obvious and felt more confident when we returned home!”

“As a first-time mom, our Dream Sock has given me peace of mind, especially when we transitioned my son to his own room”. AND “Having our Dream Sock and Owlet Cam have definitely helped us watch him when he’s sick, but just gives us that peace of mind each and every night.”

“Anytime he is sick, I put our Owlet Dream Sock on to monitor him. It’s given me peace when I’m unsure if we should wait until morning to see a doctor. This time, it caught something that I couldn’t see or hear”. AND “I’m so glad our Dream Sock gave me the necessary information to decide when to go to the hospital.”

“Our Dream Sock not only provided crucial data but also empowered me to be Perry's advocate. Without it, I fear the delay in diagnosis could have had far worse consequences”

“We are grateful to our Dream Sock for making a very stressful time easier and allowing us to sleep easier after bringing our warrior son home.”

Also available online are Owlet parent testimonials on Reddit that speak to parent empowerment, such as from questions such as “Is the Owlet sock useful?”
https://www.reddit.com/r/NewParents/comments/1hp43f1/is_the_owlet_sock_useful/

“A lot of peace of mind, I would absolutely recommend it. I can’t imagine not having it”

“I love the owlet sock. My baby came home with oxygen for the first month, so he had a medical grade pulse oxygen monitor too. The day we stopped using the professional monitor I had so much anxiety. I bought the sock that night and have slept very well because of it. It gives me a lot of peace of mind and it tells me how well my baby is sleeping”

“Love it, used with both of my kids. Gives me peace of mind when they’re sick, when they started rolling over, when I put them in their own rooms. I feel like there’s an extra pair of eyes on them when I’m sleeping”

The Dream Sock is marketed on its ability to restore peace of mind and its function is not only technical but also deeply symbolic. Unlike hospital monitors, which are loud, industrial, and institutional, the Owlet sock visually and materially aligns with the home environment and the rituals of new parenthood. It doesn’t replicate the NICU, but rather translates one of its key affordances (constant monitoring) into a form emotionally and visually acceptable in a caregiving context marked by intimacy and vulnerability. This innovation doesn’t eliminate the paradox of wanting freedom yet wanting monitoring. Instead it mediates it.

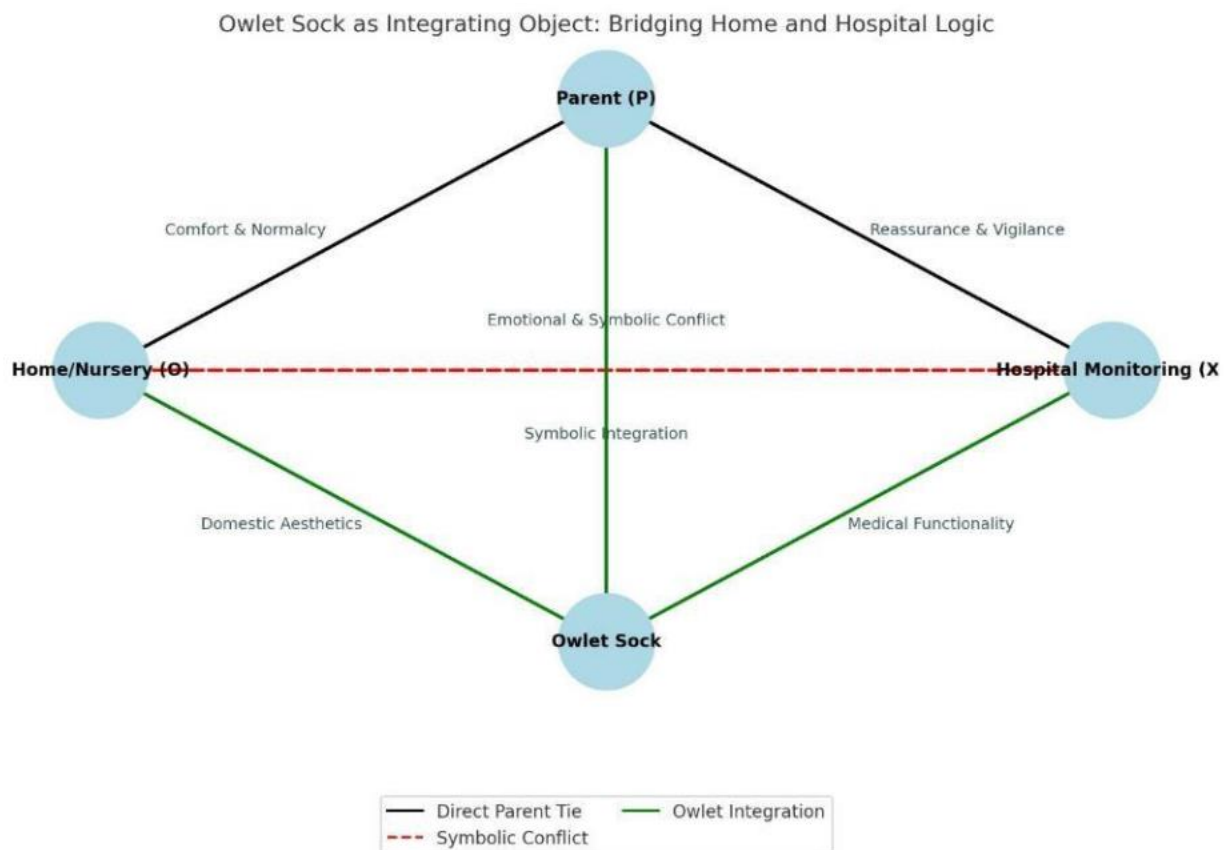


Figure 1: Owlet Sock Bridging Home Nursery and Hospital Monitoring Logics: Created with ChatGPT June 2025

DISCUSSION

Symbolic Resolution of Paradox Through Balancing Objects

The transition from the neonatal intensive care unit to the home is an emotionally fraught time for parents. This transition often evokes acute anxiety. The infant is no longer under 24-hour surveillance yet is still perceived as fragile. Parents express simultaneous desires to return to the comfort and normalcy of the home and to retain the security and authority of the clinical environment. These goals are mutually desirable but structurally incompatible, producing what we define as a paradoxical consumer dilemma.

To conceptualize how such dilemmas create conditions for innovation, we integrate paradox theory (Smith and Lewis 2011) with Heider's balance theory (1958). This fusion yields a micro-level model of how emotionally saturated consumer paradoxes can be symbolically managed through what we term "balancing objects", that is, products that resolve triadic affective tensions by reconfiguring symbolic relationships among people, objects, and meanings.

Paradox theory frames consumer contradiction as tension between competing yet interdependent demands. In the NICU context, these demands include autonomy vs. surveillance (parents desire independence and freedom from medical authority, but also desperately desire access to reassuring data and medical/clinical expertise; empowerment vs. vulnerability (parents want to feel competent and empowered in their new role but remain unsure of their ability to recognize or respond to health threats); and home vs. hospital as the contexts.

These tensions are not resolvable in the classical sense, instead, they are navigated through symbolic, emotional, and functional labor.

We argue that Heider's balance theory provides a useful model for how consumers may address this type of paradox with resources from the marketplace. The NICU-to-home dilemma maps cleanly onto the triadic structure of balance theory with the three elements – the parent (P), the home (O) as an aspirational caregiving environment, and medical monitoring (X) as a source of reassurance and safety – in tension. In this configuration, the parent values both O (home) and X (monitoring), but perceives a negative or incompatible association between O and X. Home should not feel like a hospital. This imbalance produces emotional discomfort and identity dissonance.

According to balance theory, such discomfort prompts action. While in classical applications this might lead to attitude change, in emotionally loaded contexts like parenting an NICU baby, the solution is symbolic consumption: parents seek a product that reconfigures the O-X link by making monitoring feel compatible with home. A consumer-grade, nursery-friendly monitor – like the Owlet monitoring sock – functions as a balancing object that symbolically aligns hospital style vigilance with the affective and aesthetic expectations of home.

Balancing objects are products that resolve emotionally charged paradoxes by reconciling two previously incompatible symbolic elements through symbolic reframing. The Owlet Dream Sock, for instance, recodes institutional, clinical functions into an emotionally resonant, cozily domestic form. This provides affective (emotional) alignment. It also reduces tension by enabling parents to perform conflicting identities, e.g., competent caregiver and worried novice), with narrative coherence (they offer consumers a story they can tell themselves about care, vigilance, and parental responsibility that feels emotionally and socially acceptable).

In this way, balancing objects represent a subset of compromise-market solutions—that is, market offerings that succeed not by resolving trade-offs objectively but by making paradox livable through emotional and symbolic mediation.

CONCLUSION

This framework contributes to marketing theory in three interrelated ways. 1) It extends paradox theory by shifting the focus from how consumers tolerate paradox to how they symbolically resolve it through product adoption. In this way we also extend consumer research on paradoxical choice by demonstrating how consumers in emotionally saturated domains manage contradiction by their marketplace choices. 2) It reactivates Heider's balance theory by reintroducing it as a powerful lens for analyzing emotionally structured, identity-salient consumption dilemmas, especially in health and caregiving. Integrating this largely neglected theory with paradox theory explains how consumers achieve emotional consistency across conflicting meanings and identities and the need for functional solutions. 3) It theorizes innovation conditions in emotionally paradoxical settings as promising positions for market innovation not despite the contradiction, but because of it. In this way, we offer implications for innovation and entrepreneurship, showing how new market opportunities emerge in response to these contradictory symbolic,

emotional, and functional consumer needs. By grounding our analysis in empirical data and a real-world case study, we highlight how affective paradoxes generate opportunities for product development and emotionally intelligent market design.

REFERENCES

- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84, 888-918.
- Akgül Gündoğdu, N., Temel Mert, Z., & Gündüz, E. S. (2022). Not being able to hug our baby before the cables: Early experiences of parents with premature babies. *Nursing Forum* 57(6), 1193-1203.
- Baldoni, F., Ancora, G., & Latour, J. M. (2021). Being the father of a preterm-born child: contemporary research and recommendations for NICU staff. *Frontiers in Pediatrics*, 9, 724992.
- Berry, L. L., Davis, S. W. & Wilmet, J. (2015). When the customer is stressed. *Harvard Business Review*, 93(10), 86-94.
- Braun, D., Braun, E., Chiu, V., Burgos, A. E., Gupta, M., Volodarskiy, M., & Getahun, D. (2020). Trends in neonatal intensive care unit utilization in a large integrated health care system. *JAMA Network Open*, 3(6), e205239.
- Carrigan, M., & Szmigin, I. (2004). Time, uncertainty and the expectancy experience: An interpretive exploration of consumption and impending motherhood. *Journal of Marketing Management*, 20(7-8), 771-798.
- Carrington, M. J., Neville, B. A., & Whitwell, G. J. (2010). Why ethical consumers don't walk their talk: Towards a framework for understanding the gap between the ethical purchase intentions and actual buying behaviour of ethically minded consumers. *Journal of business ethics*, 97, 139-158.
- Charchuk, M., & Simpson, C. (2003). Loyalty and hope: keys to parenting in the NICU. *Neonatal Network*, 22(4), 39-45.
- Darveau, J., & Cheikh-Ammar, M. (2021). The interplay between liminality and consumption: A systematic literature review with a future research agenda. *International Journal of Consumer Studies*, 45(4), 867-888.
- Heider, F. (2013). *The psychology of interpersonal relations*. Psychology Press.
- Holt, D. B. (2002). Why do brands cause trouble? A dialectical theory of consumer culture and branding. *Journal of consumer research*, 29(1), 70-90.
- Kerrane, K., Lindridge, A., & Dibb, S. (2021). Negotiating liminality following life transitions: reflexive bricolage and liminal hotspots. *European Journal of Marketing*, 55(4), 1177-1202.
- Llamas, R., & Belk, R. (2013). Living in a digital world. In *The Routledge companion to digital consumption* (pp. 3-12). Routledge.
- Luedicke, M. K., Thompson, C. J., & Giesler, M. (2010). Consumer identity work as moral protagonism: How myth and ideology animate a brand-mediated moral conflict. *Journal of Consumer Research*, 36(6), 1016-1032.
- Lupton, D. (2014). Health promotion in the digital era: a critical commentary. *Health promotion international*, 30(1), 174-183.
- Lupton, D., & Maslen, S. (2018). The more-than-human sensorium: sensory engagements with digital self-tracking technologies. *The Senses and Society*, 13(2), 190-202.
- McAlexander, J. H., Schouten, J. W. & Roberts, S. D. (1993). Consumer Behavior and Divorce. In Costa, J. A. & Belk, R. W. (Eds.), *Research in Consumer Behavior*, 6, Greenwich, Connecticut: JAI Press, 153-185.

- McAlexander, J. H., Dufault, B. L., Martin, D. M., & Schouten, J. W. (2014). The marketization of religion: Field, capital, and consumer identity. *Journal of Consumer Research*, 41(3), 858-875.
- McDaniel, S. R. (1999). An investigation of match-up effects in sport sponsorship advertising: The implications of consumer advertising schemas. *Psychology & Marketing*, 16(2), 163-184.
- Mick, David Glen, and Susan Fournier. "Paradoxes of technology: Consumer cognizance, emotions, and coping strategies." *Journal of Consumer research* 25, no. 2 (1998): 123-143.
- Mom's Choice Awards (2024). "Interview with Mom's Choice Award Winner Kurt Workman". Accessed at <https://momschoiceawards.com/blog/interview-with-moms-choice-award-winner-kurt-workman/> June 14, 2025
- Mowen, J. C. (1980). On product endorser effectiveness: A balance model approach. *Current issues and research in advertising*, 3(1), 41-57.
- Murkoff, Heidi. *What to Expect When You're Expecting*. Workman Publishing, 2016.
- Owlet. https://owletcare.com/?srsId=AfmBOoqqnWLvCFUmhtQm-E0Q5mYn1avZKYRKE6_7iaReW0tORy-yZsjH
- Owlet. "Owlet Blog Stories" <https://owletcare.com/blogs/stories> Accessed June 2025
- Phillips, J. M., Lin, B. S., & Costello, T. G. (1998). A balance theory perspective of triadic supply chain relationships. *Journal of Marketing Theory and Practice*, 6(4), 78-91.
- Rayburn, S. W., Mason, M. J., & Volkers, M. (2020). Service captivity: no choice, no voice, no power. *Journal of Public Policy & Marketing*, 39(2), 155-168.
- Rayburn, S. W., Makarem, S. C., Mohan, M., Arnold, T. J., & Jackson, Y. C. (2024). Development and validation of a service captivity scale. *Journal of Service Research*, 27(3), 414-431.
- Rhine, W. D. (2016). Technology—Considerations for the NICU of the Future. *Newborn and Infant Nursing Reviews*, 16(4), 208-212.
- Roy, S., Gammoh, B. S., & Koh, A. C. (2012). Predicting the effectiveness of celebrity endorsements using the balance theory. *Journal of customer behaviour*, 11(1), 33-52.
- Sabnis, A., Fojo, S., Nayak, S. S., Lopez, E., Tarn, D. M., & Zeltzer, L. (2019). Reducing parental trauma and stress in neonatal intensive care: systematic review and meta-analysis of hospital interventions. *Journal of Perinatology*, 39(3), 375-386.
- Shattawi, K. K. (2015). Suspended liminality: breastfeeding and becoming a mother in two NICUs. *International Journal of Advanced Nursing Studies*, 4(2), 75-84.
- Silverstein, M. J., & Fiske, N. (2003). Luxury for the masses. *Harvard business review*, 81(4), 48-59.
- Smith, W. K., & Lewis, M. W. (2011). Toward a theory of paradox: A dynamic equilibrium model of organizing. *Academy of management Review*, 36(2), 381-403.
- Thomson, G., & Balaam, M. C. (2019). International insights into peer support in a neonatal context: a mixed-methods study. *PloS one*, 14(7), e0219743.
- Truong, Y., McColl, R., & Kitchen, P. J. (2009). New luxury brand positioning and the emergence of masstige brands. *Journal of brand management*, 16(5), 375-382.

- Van Manen, M. (2011). The medium, the message, and the massage of the neonatal monitor screen. In Proceedings of 'McLuhan's Philosophy of Media'—Centennial Conference/Contact Forum, 26-28.
- Verbeek, P. P. (2005). What things do: Philosophical reflections on technology, agency, and design. Penn State Press.
- Woodside, A. G., & Chebat, J. C. (2001). Updating Heider's balance theory in consumer behavior: A Jewish couple buys a German car and additional buying–consuming transformation stories. *Psychology & Marketing*, 18(5), 475-495.
- Waight, E., & Boyer, K. (2018). The role of the non-human in relations of care: baby things. *Cultural Geographies*, 25(3), 459-472.

SESSION 22.6: SIGNALS, RISK, AND REVENUE IN TRAVEL MARKETS

Moderators:

Alex Ntsiful

Full Paper

The Relationship Between Religious Consumers And Liquid Versus Solid Consumption

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Nowadays, people prefer to be more ephemeral in their consumption that is considered as liquidity and avoid ownership. To expand this idea, there is a double-edged concept arising: Liquid versus solid consumption. The current study attempted to delineate how religious consumers behave based on this concept to demonstrate whether religious consumption is based on liquidity or solidity. In order to reach a logical conclusion about this issue, an online questionnaire was prepared and adopted by former researches. The questionnaire contained two parts: the first part was designed to identify the religious belief and the second part contained two scenarios about liquid versus solid consumption. 400 volunteers attended and about 150 cases were eligible for the analysis. Spearman correlation was utilized to measure the possible relationship between variables. The finding revealed that there was a significant relationship between religious consumers and liquid consumption.

Introduction

Imagine a consumer is in a condition of uncertainty such as economic difficulties, is this person would buy or rent a house or prefer to share a house with someone else or chose the nomad life? This choice would be arisen based on whether ephemerality, access based, and dematerialized, or what (Bardhi & Eckhardt, 2017) named liquidity in consumption or conversely as solid. As (Bauman, 2000), (Bauman, 2007) considered the life of consumers in nowadays life from stability to be more changing, the consumption of these consumers would be mutable. The state of being unstable caused by global mobility and dynamism in labor and flows of culture in the world based on a shift in paradigm and consumer behavior in relation to self and social relationship (Beretta et al., 2021), (Minina & Holmqvist, 2021). Furthermore, environmental consciousness has become a crucial factor in liquidity versus solidity since access-based model would be more favorable with its positive environmental impacts, and policymakers have been a supporter of this model due to their endeavors to decrease the ownership and possession and material consumption (Moeller et al., 2010), (Bardhi et al., 2012). On the other hand, this capricious behavior would bring negative outcomes due to instability and nomadism to businesses, and a real hindrance occurring caused by social and cultural attitudes and consumerism (Bardhi & Eckhardt, 2017), (Rosa, 2013), (R. Belk, 2010), (Burroughs & Rindfleisch, 2002).

There is no doubt that religion would provide a special identity and this issue will have a clear impact on social relations and identity and consequently on consumer behavior (Mathras et al., 2016). To be more specific, there are four dimensions that religion could have impacts on consumer behavior. Beliefs, rituals values, and community (Felix et al., 2018). Prior researches focus on religious consumption of luxury goods (Ma et al., 2021), religious on hope and ad credibility and consumer behavior (Sarofim & Cabano, 2018), how religion impacts consumer financial well-being (Sarofim et al., 2020), and relative between religion and consumer identity and consumption (McAlexander et al., 2014). effects of religion stability-seeking consumption (Minton & Cabano, 2021), how consumer evaluation of brands are influenced by religion (Minton et al., 2018), religion impacts on sustainable consumption (McAlexander et al., 2014), and analyzing the influence of religion and morality in food consumption. On the other hand, various researches focus on liquidity and solidity in consumption (Eckhardt & Bardhi, 2020a), (Bardhi et al., 2012), (Eckhardt & Bardhi, 2020b), (Minina & Holmqvist, 2021), (Bardhi & Eckhardt, 2017), (Beretta et al., 2021). Analyzing ownership in the concept of liquidity versus solidity is a main item, and the consequences of such issues on identity of consumers could be considered as a focal action for marketers (Lamberton & Goldsmith, 2021). Insecurity and risk perception and increasing concern of future life would affect the movement of consumers toward liquidity. Such issue may happened as common sense may believe that consumers would prefer liquidity in the time of instability (Atanasova et al., 2023). Concerning the co-existence of liquidity and solidity in consumption, consumers desire can be fluctuated between solid and liquid consumption and such movement in role of consumption can be occur based on conditions and context (Rosenberg, Laura Weijs, Henri Kerkelä, 2023). In sum up, although a number of research attempted to enter the area of materialism, ownership and such issues impact on consumption (Pace, 2013), (Mick, 2017), (Atanasova & Eckhardt, 2021), there is little research analyze the

religious consumer behavior in the area of consumer decisions to solidify or liquefy the consumption. The current study will analyze religious consumption to know whether religious consumers tend to be liquid or solid.

Conceptual Framework

Over the last decade, markets have witnessed a dramatic change in consumption and consumer behavior toward possession and ownership. Consumers nowadays would prefer to use and experience provisional access to goods (Bardhi et al., 2012), (Chen, 2009). Technologies and progress of public service have enabled the consumers to access the products and services far from ownership and instead, by sharing them (Bardhi et al., 2012), (Figueiredo & Uncles, 2015), (Chen, 2009). Therefore, Acquisition and possession are now an option, not an ultimate and final goal or desire of a consumer. Consumers are now borrowing books from public libraries and using public services like buses and taxis and sharing bikes and cars through Zipcar and other applications that enable them to exchange and temporary use instead of ownership (Bardhi & Eckhardt, 2017), (Eckhardt & Bardhi, 2020b), (Moeller et al., 2010).

Ownership itself regularly is a way that consumers can set up not only identity and personal brand but also their wealth and prosperity. Furthermore, possession also can bring a sense of responsibility and dedication that may lead to negative outcomes like storing redundant goods (Beretta et al., 2021). On the other side, there is an emerging consumption attitude tending to be more access-based. In this model, prefer to access the goods and services and would like to temporary approach instead of purchasing and owning (Eckhardt & Bardhi, 2020a).

Religion is considered a social ideology that has crucial impacts on different aspects of humans. In fact, about 90 percent of people in the United States tend to believe in some kind of religion (He & Tian, 2023). Therefore, it would be clear that religion has a great impact on human social life. In the area of marketing and consumption, various researchers have tried to analyze the role of religion in consumption. In order to consider the role of religion in consumption, three areas in this issue can be discussed: materialism, sustainability, and volunteering behavior (Minton et al., 2016). While (Minkler, 2004) posit that the consumption of religious people would influence by consumer piety and way of life. On the other hand, there are limitations and restrictions on religion that may lead consumers to prohibit their expenditure and consumption (He & Tian, 2023) (Ma et al., 2021) (Ben-Nun Bloom & Arikan, 2012). Furthermore, in the realm of sustainable consumption, religion may have a positive role in sustainable consumption (Minton et al., 2019). Environmental concern would be another factor that may influence consumption in religious groups. Since Religiousness pays attention to environmental issues and this item directly affects consumption (Felix et al., 2018).

In order to develop the concept, the current study uses (Mick, 2017) research on Buddhist Psychology. Reference (Mick, 2017) stated that ownership is defined as having a thing or the power to control it. This power and mastery to control things are for meeting the demands of permanence and social needs for humans and consumers (Mick, 2017), (R. W. Belk, 1988), (Pierce et al., 2003) The issue of possession and ownership is rebuked in Buddhist psychology and the pursuit of possession is irrational because it would lead to noxious consequences since it encourages the dependency on self and this attachment would be futile and temporary because all things tend to change and degenerate (Mick, 2017). Furthermore, the tendency to own and control things is an obstacle to mental health due to increased anxiety and panic (Shu & Peck, 2011), (Burroughs & Rindfleisch, 2002). In another word, Reference (Pace, 2013) focused on materialism and religion. Materialism is the inclination of humans and consumers to possess things and this tendency has a central role in personal life and is considered as a source of contentment and discontent. Therefore, it is clear that possession is a decisive dimension of materialism (Burroughs & Rindfleisch, 2002), (R. W. Belk, 1988). Although materialism can provide positive personalities like diligence and innovation, it is frequently considered a destructive trait (Pace, 2013), (R. W. Belk, 1985). Religious theme criticizes immoderate possession and consumption because it may divert you from religious duty and concentrate on self. Moreover, ownership and materialism may pave the way for unethical behavior like envy and greed to have more possessions that lead to an imbalance in social discipline (Casidy et al., 2021), (Rambelli, 2008), (Corner, 2009).

However, since dematerialization is one of the dimensions of liquidity, it would be expected that religious consumers tend to liquidity in consumption. In liquid consumption, consumers prefer access-based use of products and sharing like sharing leading to less possession and ownership (Bardhi & Eckhardt, 2017), (Van Boven, 2005), (Tully et al., 2015). The increasing level of dematerialization in modern life is more obvious in digital products like software have led to less ownership and liquidity in consumption (R. Belk, 2010), (Lee, 2011), (Bernardini & Galli,

1993). To summarize, concerning religious consumption and liquid versus solid, the current study proposes that: There is no significant correlation between religious consumers and liquid consumption.

Methodology

In order to analyze the hypotheses, a convenient sampling method was applied to cover all kinds of consumer attitudes. Moreover, the data were collected in questionnaire form concerning the literature review of the research. Since it was not possible to deliver the questionnaire to consumers face to face due to time and cost issues, an online Google Form was created to offer the questionnaire to the consumers. Although it was not important for the research to consider the age, race, sex, and other regular segmentation of the consumers, it was attempted to cover various kinds of consumers and contains diversity of the consumers. The prepared questionnaire contained two parts. The first part included 18 questions to determine the religiosity of the consumers (Casidy et al., 2021). The second part contained two scenarios. In scenario 1, consumers were asked to imagine the condition that want to have a bike for daily moving. There are two options: you can buy a bike for \$450 or they can rent it from a sharing company for a \$1 fee for every hour. Consumers can unlock this bike all over the city where they live and they need just a smartphone to unlock the bike and use it. To develop this part, four questions with a 5-point Likert-type scale (Strongly Disagree-Strongly Agree) were conducted to determine consumer preference for buying over renting a bike. In scenario 2, consumers were asked to imagine they needed a laptop to fit their needs. Consumers should choose to have a laptop between two options: they can buy a laptop ranging from \$700-1500 or they can rent it for \$10-20 per month. This scenario also consisted of four questions with 5-point Likert-type scale (Strongly Disagree-Strongly Agree) to specify consumer behavior due to the condition of buying or renting the product (Beretta et al., 2021). The completed questionnaire form was open on Google Forms for the participants to fill out in January 2024. After this period, it was collected 400 completed forms and among these cases, after considering the first part of the questionnaire, it was specified that 150 participants have religious attitudes and religiosity affects their behaviors. Therefore, the data of these participants were considered for the research to test the hypotheses of the research.

Results

Determining the reliability of scales of the research has been obtained through the SPSS program with the data generated by the research. The Cronbach Alpha test used in the current study and according to this test, the Cronbach Alpha coefficient of the scales should be higher than .70. Based on the results of reliability analysis, religiosity Cronbach Alpha was .986 for the first part of the questionnaire and for scenarios in the second part of analysis, the Cronbach alpha was .968 denoted a good internal consistency and reliability was obtained ($M = 2.30$, $SD = .664$). To test the hypothesis, the Spearman test was conducted. The spearman was. Spearman's rank correlation was computed to assess the relationship between religious consumers and liquidity in consumption. There was a strong positive correlation between the two variables ($N=150$, $\text{Sig (Two-tailed)} = .039$, $p = .169$, $p < .001$). Therefore, the null hypothesis was rejected.

Discussion

Although consumer behavior has been criticized for being insular, it is also considered as a prediction and description (Mick, 2017). Therefore, this field needs to provide updated insights beyond the dominant models and paradigms to prepare a better understanding of the dimensions of this field (Mick, 2017). The current research attempted to enter the liquid and solid consumption area. To elucidate the dimensions of liquidity and solidity, a clear explanation of ephemerality, access-based and dematerialization has been offered to describe liquid consumption. On the other hand, the preference of ownership and materialism is considered as solidity in consumption. In solidity, possession and material objects play a key role in consumer identity, whereas the fluid nature of liquidity in consumption would emerge as sharing and preference of not ownership and possession. Although liquidity and solidity seem a double-edged concept, consumers can be moved from liquidity to solidity or vice-versa. Economical situations can fluctuate consumer behavior from liquidity to solidity. For instance, severe and difficult economic situations may lead to consumers preferring to share material and be liquid. This consumer may change their consumption behavior to a better and more prosperous situation and incline to possession and solidity (Saravade et al., 2021).

The main goal of this study was to bridge on religious consumers with liquid versus solid consumption. It is clearly important that consumers with religious beliefs play a key role in the overall consumption of products and such considerable consumer behavior toward liquidity and solidity has been analyzed in the current study. The main finding of the research is that. Similarly, to (Pace, 2013), consumers with religious beliefs normally snub materialism and possessions due to spirituality and ethical qualities (Vitell, 2009). To understand better the religious

consumers, the psychological and sociological dimensions of religion with resistance of self would affect materialism and curb the intention toward materialism. This propensity to dematerialization would agree with the main result of the current study. Such attitudes toward ownership and materialism typically resonate with self and being self-centered psychologically affect consumer beliefs about environmental issues and thus contribute to this study's theoretical framework (Felix & Almaguer, 2019). Conversely to the finding of this research, the instability of the consumer to fluctuate from liquidity to solidity is scrutinized in recent works. Reference (Rosenberg, Laura Weijo, Henri Kerkelä, 2023) demonstrates such a volatile situations in consumer behavior are the same as consumers desires that change in everyday lives. Consumers can balance such rotation between liquidity and solidity in various contexts and situations. Furthermore, a sense of insecurity would dramatically change consumer behavior from solidity to liquidity. In this context, consumers would deny responsibility and risk and the increasing of such pressure to adopt would lead to exploring viable methods to handle the insecurity through liquid consumption (Atanasova et al., 2023). In contrast to this, the current study finding suggests that religious consumers would not change their consumption and they would be stable their tending toward liquidity. Future research would be encouraged to scrutinize the various conditions and contexts that religious consumer tendency toward liquidity and solidity.

Managerial Implication

The current study reveals religious consumer behavior. The research follows the predominant paradigm that religious consumers deny materialistic consumption and they against accumulative ownership. Therefore, the result delineates the importance of materialism and ownership response by religious consumers. Besides academic literature, the result of the study benefits marketing practitioners with its implications. Marketers encouraging sustainable consumption can benefit the outcome of this study. It is important to note that consumers with a sense of fluid and liquidity repel the ownership and prefer sharing in the consumption. Therefore, marketers should vary of religious consumers when they attempt to offer a more materialistic product to avoid a decrease in purchasing since religious consumers hold a considerable share of the market. Furthermore, marketers and companies should attempt to apply tactics in promotion and advertising that facilitate consumption by signaling access and sharing the ability of products to lead sustainable consumption. In addition, firms should emphasize the significance of the perceived values of religious consumers and reduce gap between them with materialistic products and services encounter by offering more liquidity and fluidity opportunities.

Research Limitation

Although this study has tried to demonstrate a comprehensive image of religious consumer behavior toward liquidity and solidity, there is no doubt that some limitations might impair the finding to be generalized. First, the data collections could be held in a larger scale with more participants to strengthen the analysis. Second, this study ignored the differentiation of participants in terms of gender, age, income. Third, the data collection was held in the low level of religion diversity. Forth, the participants were offered with two scenarios with regard to specified products that might not utilized for every possible consumer.

References

- Atanasova, A., & Eckhardt, G. M. (2021). The broadening boundaries of materialism. *Marketing Theory*, 21(4), 481–500. <https://doi.org/10.1177/14705931211019077>
- Atanasova, A., Eckhardt, G. M., & Husemann, K. C. (2023). Liquid Consumer Security. *Journal of Consumer Research*, 00. <https://doi.org/10.1093/jcr/ucad047>
- Bardhi, F., & Eckhardt, G. M. (2017). Liquid consumption. *Journal of Consumer Research*, 44(3), 582–597. <https://doi.org/10.1093/jcr/ucx050>
- Bardhi, F., Eckhardt, G. M., & Arnould, E. J. (2012). Liquid relationship to possessions. *Journal of Consumer Research*, 39(3), 510–529. <https://doi.org/10.1086/664037>
- Bauman, Z. (2000). *Liquid Modernity*. Polity.
- Bauman, Z. (2007). Liquid Arts. *Theory, Culture & Society*, 24(1), 117–126. <https://doi.org/10.1177/0263276407071579>

- Belk, R. (2010). Sharing. *Journal of Consumer Research*, 36(5), 715–734. <https://doi.org/10.1086/612649>
- Belk, R. W. (1985). Materialism: Trait Aspects of Living in the Material World. *Journal of Consumer Research*, 12(3), 265. <https://doi.org/10.1086/208515>
- Belk, R. W. (1988). Possessions and the Extended Self. *Journal of Consumer Research*, 15(2), 139–168. <https://doi.org/10.1086/209154>
- Ben-Nun Bloom, P., & Arikan, G. (2012). A Two-edged Sword: The Differential Effect of Religious Belief and Religious Social Context on Attitudes towards Democracy. *Political Behavior*, 34(2), 249–276. <https://doi.org/10.1007/s11109-011-9157-x>
- Beretta, E., Miniero, G., & Ricotta, F. (2021). Consumers' journey between liquid and solid consumption. *Sustainability (Switzerland)*, 13(24), 1–20. <https://doi.org/10.3390/su132413730>
- Bernardini, O., & Galli, R. (1993). Dematerialization: Long-term trends in the intensity of use of materials and energy. *Futures*, 25(4), 431–448. [https://doi.org/10.1016/0016-3287\(93\)90005-E](https://doi.org/10.1016/0016-3287(93)90005-E)
- Burroughs, J. E., & Rindfleisch, A. (2002). Materialism and Well-Being: A Conflicting Values Perspective. *Journal of Consumer Research*, 29(3), 348–370. <https://doi.org/10.1086/344429>
- Casidy, R., Duhachek, A., Singh, V., & Tamaddoni, A. (2021). Religious Belief, Religious Priming, and Negative Word of Mouth. *Journal of Marketing Research*, 58(4), 762–781. <https://doi.org/10.1177/00222437211011196>
- Chen, Y. (2009). Possession and access: Consumer desires and value perceptions regarding contemporary art collection and exhibit visits. *Journal of Consumer Research*, 35(6), 625–640. <https://doi.org/10.1086/593699>
- Corner, P. D. (2009). Workplace spirituality and business ethics: Insights from an eastern spiritual tradition. *Journal of Business Ethics*, 85(3), 377–389. <https://doi.org/10.1007/s10551-008-9776-2>
- Eckhardt, G. M., & Bardhi, F. (2020a). New dynamics of social status and distinction. *Marketing Theory*, 20(1), 85–102. <https://doi.org/10.1177/1470593119856650>
- Eckhardt, G. M., & Bardhi, F. (2020b). The value in de-emphasizing structure in liquidity. *Marketing Theory*, 20(4), 573–580. <https://doi.org/10.1177/1470593120941038>
- Felix, R., & Almaguer, J. (2019). Nourish what you own: psychological ownership, materialism and pro-environmental behavioral intentions. *Journal of Consumer Marketing*, 36(1), 82–91. <https://doi.org/10.1108/JCM-10-2017-2417>
- Felix, R., Hinsch, C., Rauschnabel, P. A., & Schlegelmilch, B. B. (2018). Religiousness and environmental concern: A multilevel and multi-country analysis of the role of life satisfaction and indulgence. *Journal of Business Research*, 91(March 2017), 304–312. <https://doi.org/10.1016/j.jbusres.2018.06.017>
- Figueiredo, B., & Uncles, M. (2015). Moving across time and space: temporal management and structuration of consumption in conditions of global mobility. *Consumption Markets and Culture*, 18(1), 39–54. <https://doi.org/10.1080/10253866.2014.899215>
- He, Y., & Tian, W. (2023). Religious Participation: Does It Shape Food Consumption? *Religions*, 14(3), 1–12. <https://doi.org/10.3390/rel14030350>
- Lamberton, C., & Goldsmith, K. (2021). Ownership: A perennial prize or a fading goal? A curation, framework, and agenda for future research. *Journal of Consumer Research*, 47(2), 301–309.

<https://doi.org/10.1093/JCR/UCAA027>

- Lee, R. L. M. (2011). Modernity, solidity and agency: Liquidity reconsidered. *Sociology*, 45(4), 650–664. <https://doi.org/10.1177/0038038511406582>
- Ma, J., Hong, J. H., Yoo, B., & Yang, J. (2021). The effect of religious commitment and global identity on purchase intention of luxury fashion products: A cross-cultural study. *Journal of Business Research*, 137(February), 244–254. <https://doi.org/10.1016/j.jbusres.2021.08.040>
- Mathras, D., Cohen, A. B., Mandel, N., & Mick, D. G. (2016). The effects of religion on consumer behavior: A conceptual framework and research agenda. *Journal of Consumer Psychology*, 26(2), 298–311. <https://doi.org/10.1016/j.jcps.2015.08.001>
- McAlexander, J. H., Dufault, B. L., Martin, D. M., & Schouten, J. W. (2014). The marketization of religion: Field, Capital, and consumer identity. *Journal of Consumer Research*, 41(3), 858–875. <https://doi.org/10.1086/677894>
- Mick, D. G. (2017). Buddhist psychology: Selected insights, benefits, and research agenda for consumer psychology. *Journal of Consumer Psychology*, 27(1), 117–132. <https://doi.org/10.1016/j.jcps.2016.04.003>
- Minina, A., & Holmqvist, J. (2021). Liquid, solid and in-between: service relationships in global mobility. *Consumption Markets and Culture*, 24(6), 575–595. <https://doi.org/10.1080/10253866.2021.1897580>
- Minkler, L. (2004). Review of Social Economy Religious Identity and Consumption. *REVIEW OF SOCIAL ECONOMY*, 3(September 2003), 37–41.
- Minton, E. A., & Cabano, F. G. (2021). Religiosity's influence on stability-seeking consumption during times of great uncertainty: the case of the coronavirus pandemic. *Marketing Letters*, 32(2), 135–148. <https://doi.org/10.1007/s11002-020-09548-2>
- Minton, E. A., Jeffrey Xie, H., Gurel-Atay, E., & Kahle, L. R. (2018). Greening up because of god: The relations among religion, sustainable consumption and subjective well-being. *International Journal of Consumer Studies*, 42(6), 655–663. <https://doi.org/10.1111/ijcs.12449>
- Minton, E. A., Johnson, K. A., & Liu, R. L. (2019). Religiosity and special food consumption: The explanatory effects of moral priorities. *Journal of Business Research*, 95, 442–454. <https://doi.org/https://doi.org/10.1016/j.jbusres.2018.07.041>
- Minton, E. A., Kahle, L. R., Juan, T. S., & Tambyah, S. K. (2016). Addressing Criticisms of Global Religion Research: A Consumption-Based Exploration of Status and Materialism, Sustainability, and Volunteering Behavior. *Journal for the Scientific Study of Religion*, 55(2), 365–383. <http://www.jstor.org/stable/26651440>
- Moeller, S., Wittkowski, K., Catulli, M., Lindley, J. K., Reed, N. B., Green, A., Hyseni, H., Kiri, S., Ng, W., & Thorpe, R. (2010). Managing Service Quality: An International Journal"Not another study of great leaders: Entrepreneurial leadership in a mid- sized family firm for its further growth and development The burdens of ownership: reasons for preferring renting. *An International Journal Journal of Services Marketing Iss International Journal of Entrepreneurial Behaviour & Research*, 20(5), 885–2111. <http://dx.doi.org/10.1108/09604521011027598>
- Pace, S. (2013). Does Religion Affect the Materialism of Consumers? An Empirical Investigation of Buddhist Ethics and the Resistance of the Self. *Journal of Business Ethics*, 112(1), 25–46. <https://doi.org/10.1007/s10551-012-1228-3>
- Pierce, J. L., Kostova, T., & Dirks, K. T. (2003). The State of Psychological Ownership: Integrating and Extending a Century of Research. *Review of General Psychology*, 7(1), 84–107. <https://doi.org/10.1037/1089->

- Rambelli, F. (2008). *A Cultural History of Objects in Japanese Buddhism*.
- Rosa, H. (2013). *Social acceleration : a new theory of modernity*. Columbia University Press.
<https://doi.org/https://doi.org/10.7312/rosa14834>
- Rosenberg, Laura Weijs, Henri Kerkelä, I. (2023). Consumer Desires and the Fluctuating Balance between Liquid and Solid Consumption: The Case of Finnish Clothing Libraries. *Journal of Consumer Research*, 50(4), 826–847. <https://doi.org/https://doi.org/10.1093/jcr/ucad021>
- Saravade, S., Felix, R., & Firat, A. F. (2021). From Solidity to Liquidity: Macro-Level Consumption Patterns in the Sharing Economy. *Journal of Macromarketing*, 41(2), 284–296. <https://doi.org/10.1177/0276146720958184>
- Sarofim, S., & Cabano, F. G. (2018). In God we hope, in ads we believe: the influence of religion on hope, perceived ad credibility, and purchase behavior. *Marketing Letters*, 29(3), 391–404. <https://doi.org/10.1007/s11002-018-9469-2>
- Sarofim, S., Minton, E., Hunting, A., Bartholomew, D. E., Zehra, S., Montford, W., Cabano, F., & Paul, P. (2020). Religion's influence on the financial well-being of consumers: A conceptual framework and research agenda. *Journal of Consumer Affairs*, 54(3), 1028–1061. <https://doi.org/10.1111/joca.12315>
- Shu, S. B., & Peck, J. (2011). Psychological ownership and affective reaction: Emotional attachment process variables and the endowment effect. *Journal of Consumer Psychology*, 21(4), 439–452.
<https://doi.org/10.1016/j.jcps.2011.01.002>
- Tully, S. M., Hershfield, H. E., & Meyvis, T. (2015). Seeking lasting enjoyment with limited money: Financial constraints increase preference for material goods over experiences. *Journal of Consumer Research*, 42(1), 59–75. <https://doi.org/10.1093/jcr/ucv007>
- Van Boven, L. (2005). Experientialism, materialism, and the pursuit of happiness. *Review of General Psychology*, 9(2), 132–142. <https://doi.org/10.1037/1089-2680.9.2.132>
- Vitell, S. J. (2009). The role of religiosity in business and consumer ethics: A review of the literature. *Journal of Business Ethics*, 90(SUPPL. 2), 155–167. <https://doi.org/10.1007/s10551-0>

SESSION 22.7: HEARTS & HOUSE MONEY—PLACE YOUR BETS ON DESIGN AND DESIRE

Moderators:

Joanne Tran

Summary Brief

It's So Ugly, It's Cute: How Humor Drives Consumer Preference for Ugly-Cute Aesthetics

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This research explores the consumer appeal of ugly-cute aesthetics, which refer to visual features that depart from traditional beauty standards, such as asymmetry, exaggerated proportions, or unconventional facial structures, yet retain qualities that make the object appear endearing. Across four studies, we test how ugly-cute aesthetics influence willingness to donate or pay for real animals and animal-themed products. We hypothesize that humor, rather than traditional attractiveness, drives this effect. This work aims to contribute to the aesthetic and consumer behavior research on norm-violating design appeal and implications for conservation efforts, product design, and advertising.

Introduction

Why do people donate to help a blobfish or buy a plush toy modeled after unconventional creatures like the axolotl? Animals that defy conventional beauty standards are often described as “ugly-cute” and receive surprising levels of affection (Cross, 2025; Langley, 2017). Despite lacking symmetrical features or aesthetic harmony, these animals have become popular not only in conservation campaigns but also as consumer products, frequently transformed into plush toys, figurines, and collectibles that capitalize on their quirky charm (Li et al., 2024; Ugly Animal Preservation Society, n.d.).

The beauty premium refers to a cognitive bias in which individuals and objects perceived as physically attractive are ascribed more positive traits and receive preferential treatment across various domains (Langlois et al., 2000). Early work in social psychology demonstrated that attractive people are assumed to be more intelligent, competent, and kind compared to unattractive individuals (Dion et al., 1972). This advantage generalizes across contexts, influencing decisions in hiring (Watkins & Johnston, 2000), product design (Bloch, 1995), packaging (Reber et al., 2004), and charitable giving (Fisher & Ma, 2014). In the context of wildlife conservation, attractive animals are more likely to be featured in media campaigns and be preferred compared to less attractive species (Harnish & Natarajan, 2020), even when those species are equally or more endangered (Cryder et al., 2017; Knight, 2008).

As this prior work suggests, unattractive animals face an unfair disadvantage, not because of their ecological value or level of threat, but because they violate aesthetic expectations. However, some creatures challenge this pattern. Animals and products (e.g., UglyDolls; Bundel, 2019) that are visually awkward, exaggerated, or grotesque but still evoke delight appear to sidestep the beauty premium. They may even benefit from an alternate form of aesthetic appeal that relies less on symmetry and visual fluency and more on incongruity and emotional reappraisal. As such, this research investigates how “ugly-cute” stimuli influence consumer preference, such as encouraging donations and purchasing behavior, through humor rather than traditional attractiveness. Understanding this appeal is essential for rethinking design, donation behavior, and the broader aesthetic biases that shape consumer and conservation decisions.

Background

Aesthetics refer to the principles and perceptions that guide judgments of visual appeal, often based on symmetry, fluency, and coherence (Reber et al., 2004). Within this framework, cuteness is a form of aesthetic appeal that stems from baby-like traits such as large eyes, round faces, and small size, which trigger feelings of affection (Lorenz, 1943; Sherman et al., 2009). In contrast, ugliness, or unattractiveness, involves features that deviate from conventional beauty norms, such as asymmetry, distortion, or awkwardness, which can disrupt visual processing (Langlois et al., 2000). Building on these concepts, we define *ugly-cute aesthetics as visual features that depart from traditional beauty standards yet retain qualities that make the object appear endearing*. Ugly-cute objects violate aesthetic norms through asymmetry, exaggerated proportions, or unconventional facial structures. However, these atypical traits may be offset by signals of harmlessness or playfulness, allowing for a reinterpretation of the stimulus

as endearing rather than threatening. This emotional reappraisal echoes the logic of “benign violations” in humor (McGraw & Warren, 2010), suggesting that ugly-cute items may derive appeal from their capacity to amuse viewers.

While conventional beauty often predicts positive evaluations and behavior through the beauty premium (Langlois et al., 2000), emerging work suggests that norm-violating stimuli can also elicit favorable responses when paired with affective reinterpretation. As such, ugly-cute aesthetics may blend visual deviance with emotional appeal, creating a distinctive route to consumer preference that does not rely on traditional attractiveness. Research in social perception and product design shows that unexpected or incongruous features can increase attention and engagement (Ludden et al., 2012). In conservation, less traditionally attractive animals like the blobfish or proboscis monkey have gained popularity through viral content and merchandise (Langley, 2017; Ugly Animal Preservation Society, n.d.), suggesting a shift in what triggers preference. This shift may occur because ugly-cute aesthetics invite emotional engagement through their unconventional and playful designs (Li et al., 2024; Nenkov & Scott, 2014), prompting individuals to be more inclined to donate to ugly-cute animals or pay for a product featuring one.

One mechanism that may explain this effect is humor. Benign violation theory proposes that humor emerges when something appears off or wrong but is perceived as safe and inconsequential (McGraw & Warren, 2010). Ugly-cute aesthetics fit this framework - they look strange, exaggerated, or even “wrong,” but in a way that feels playful or amusing rather than threatening. When visual disfluency is paired with cues that invite reinterpretation (i.e., something that looks unconventional but playful), it could lead to laughter instead of aversion (Warren & McGraw, 2016). While humor has been shown to reduce charitable giving in serious domains, such as cancer fundraising (Sewak et al., 2025), it may play a different role in the context of animals and products. Humor may also help reframe what is initially seen as odd or unattractive into something likable and preferred.

Proposed Studies

This research proposes four studies focusing on the impact of ugly-cute aesthetics on donation and purchase behaviors. The first study explores the main effects of ugly-cute aesthetics on consumers’ donation intent. Participants will view photos of endangered animals at a local zoo, categorize them as cute, ugly, or ugly-cute, and rate their likelihood of donating to support the animal’s care. The second study will replicate the first study using plush toys and ask participants how much they would be willing to pay for each product. The third study will replicate the main effects of the first two studies and introduce humor as a mediator. The mediating effect of humor between ugly-cute aesthetics and willingness to pay will be examined. Lastly, the fourth study will be in a field setting at a local community zoo. Participants will view a photo of an animal and be invited to donate one dollar by writing their names on a shared community poster. This real behavior will provide converging evidence that ugly-cute animals can elicit more donations in naturalistic settings.

Conclusion

Understanding the appeal of ugly-cute animals and products provides critical insight into how aesthetic norms shape consumer and conservation behavior. While the beauty premium often privileges symmetrical, traditionally attractive stimuli, the rise of ugly-cute suggests that people can also form strong emotional connections with visually unconventional designs. By blending norm-violating features with signals of playfulness and safety, ugly-cute designs tap into a distinct affective pathway – humor – that promotes consumer preference. This emotional bridge allows viewers to reinterpret awkward or grotesque appearances as endearing, increasing their willingness to donate to causes or pay for products that might otherwise be overlooked. By examining this mechanism across experimental and field studies, this paper aims to expand the current understanding of aesthetic judgment and provide practical implications for fundraising, product design, advertising, and wildlife conservation initiatives.

References

- Bloch, P. H. (1995). Seeking the ideal form: Product design and consumer response. *Journal of Marketing*, 59(3), 16-29.
- Bundel, A. (2019). ‘UglyDolls,’ starring Kelly Clarkson, is trying to do more than just sell toys. NBC News. <https://www.nbcnews.com/think/opinion/uglydolls-starring-kelly-clarkson-trying-do-more-just-sell-toys-ncna1001736>
- Cross, G. (2025). The blobfish, ‘bullied his whole life,’ named fish of the year in public vote. USA Today. <https://www.usatoday.com/story/news/world/2025/03/19/blobfish-worlds-ugliest-animal-fish-of-the->

- Cryder, C., Botti, S., & Simonyan, Y. (2017). The charity beauty premium: Satisfying donors' "want" versus "should" desires. *Journal of Marketing Research*, 54(4), 605-618.
- Dion, K., Berscheid, E., & Walster, E. (1972). What is beautiful is good. *Journal of Personality and Social Psychology*, 24(3), 285-290.
- Fisher, R. J., & Ma, Y. (2014). The price of being beautiful: Negative effects of attractiveness on empathy for children in need. *Journal of Consumer Research*, 41(2), 436-450.
- Harnish, R. J., & Natarajan, R. (2020). Attitudes toward wildlife: The impact of physical attractiveness. *Psychology & Marketing*, 37(12), 1703-1707.
- Knight, A. J. (2008). "Bats, snakes and spiders, Oh my!" How aesthetic and negativistic attitudes, and other concepts predict support for species protection. *Journal of Environmental Psychology*, 28(1), 94-103.
- Langley, L. (2017). This Is Why We Find 'Ugly' Animals Cute. National Geographic. <https://www.nationalgeographic.com/science/article/animals-ugly-cute-psychology?loggedin=true>
- Langlois, J. H., Kalakanis, L., Rubenstein, A. J., Larson, A., Hallam, M., & Smoot, M. (2000). Maxims or myths of beauty? A meta-analytic and theoretical review. *Psychological Bulletin*, 126(3), 390-423.
- Lorenz, K. (1943). Die angeborenen Formen möglicher Erfahrung [The innate forms of potential experience]. *Zeitschrift für Tierpsychologie*, 5, 233-519.
- Ludden, G. D., Schifferstein, H. N., & Hekkert, P. (2012). Beyond surprise: A longitudinal study on the experience of visual-tactual incongruities in products. *International Journal of Design*, 6(1), 1-23.
- McGraw, A. P., & Warren, C. (2010). Benign violations: Making immoral behavior funny. *Psychological Science*, 21(8), 1141-1149.
- Nenkov, G. Y., & Scott, M. L. (2014). "So cute I could eat it up": Priming effects of cute products on indulgent consumption. *Journal of Consumer Research*, 41(2), 326-341.
- Reber, R., Schwarz, N., & Winkielman, P. (2004). Processing fluency and aesthetic pleasure: Is beauty in the perceiver's processing experience? *Personality and Social Psychology Review*, 8(4), 364-382.
- Sewak, S., Lee, J., & Haderlie, T. C. (2025). Brand posts with memes on social media: perceived humor and consumer engagement. *Journal of Consumer Marketing*.
- Sherman, G. D., Haidt, J., & Coan, J. A. (2009). Viewing cute images increases behavioral carefulness. *Emotion*, 9(2), 282-286.
- Ugly Animal Preservation Society. (n.d.). The Ugly Animal Preservation Society. <https://uglyanimalsoc.com/>
- Warren, C., & McGraw, A. P. (2016). Differentiating what is humorous from what is not. *Journal of Personality and Social Psychology*, 110(3), 407.
- Watkins, L. M., & Johnston, L. (2000). Screening job applicants: The impact of physical attractiveness and application quality. *International Journal of Selection and Assessment*, 8(2), 76-84.

SESSION 22.8: BELIEF, NEED, AND THE LURE OF THE FEED

Moderators:

Robert Jewell

Summary Brief

HOPE IN A BOTTLE: Consuming Online Prescriptions

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Approximately two decades ago, the U.S. Food and Drug Administration (FDA) eased disclosure requirements related to risk information for prescription drugs in direct-to-consumer advertising (DTCA) on television and radio (Applequist & Ball, 2018). This regulatory shift marked a pivotal moment in pharmaceutical marketing, paving the way for DTCA to become a prominent feature of consumer broadcast media. Nevertheless, DTCA of prescription drugs represents one of the most pervasive forms of health communication targeting the U.S. public (Shmerling, 2025). With American adults spending an average of 4.5 hours per day watching television (The Nielsen Company, 2016), exposure to televised DTCA is substantial, potentially exceeding 30 hours annually per individual (Brownfield et al., 2004). This figure does not account for additional exposure through print, radio, billboards, and increasingly prevalent internet-based promotional platforms (Shmerling, 2025).

E-DTCA and Digital Pharmacies

DTCA of pharmaceuticals is prohibited in nearly all developed nations, with the notable exceptions of the United States and New Zealand (Ventola, 2011). In the U.S., while the Food and Drug Administration (FDA) has issued guidance on aspects of Internet-based off-label promotion, it has yet to establish clear regulatory standards for other forms of digital advertising, particularly those disseminated through social media platforms (Ventola, 2011). This regulatory gap in the largest DTCA-permitting market raises concerns about the global diffusion of electronic DTCA (eDTCA) content, particularly via digital channels that transcend national borders and enforcement jurisdictions (Donohue et al., 2007). The potential for DTCA to mislead consumers through persuasive messaging that prioritizes marketing objectives over patient education and safety is exacerbated by the proliferation of online pharmacies. Over the forecast period from 2025 to 2029, the online pharmacy market is expected to expand at a compound annual growth rate (CAGR) of 7.64%, reaching an estimated market volume of US\$130.46 billion by 2029. User penetration of online pharmacy prescriptions was estimated at 13.07% in 2025 and projected to rise to 16.16% by 2029. The average revenue per user is forecasted to reach US\$95.16, reflecting a trend toward increased individual spending on digital prescription services. In global comparison, the United States is leading the market, generating an estimated US\$27.67 billion in revenue in 2025 (Statista, 2025).

In 2024, the Centers for Disease Control and Prevention (CDC) notified public health officials and clinicians. They informed patients about a potential public health risk associated with individuals ordering prescription medications from online pharmacies. Research has shown that DTCA may negatively affect the patient–prescriber relationship by undermining physicians' clinical authority, fostering unrealistic patient expectations, and creating pressure to prescribe specific drugs regardless of medical appropriateness (American College of Physicians, 2006; Mintzes, 2012; Robinson et al., 2004). However, research on consumer use of online pharmacies and its consequences to their well-being, safety, and relationship with healthcare providers and systems is still limited. Consumers can now bypass their primary care providers and order prescription drugs with a few clicks online. For example, "hers" targets women with depression and anxiety pharmaceutical solutions, "Wisp" promises women stigma free solutions for their sexual health, "Alloy" enables women to access hormone prescriptions, and "Musely" offers consumers prescription skin treatments, after answering a few questions and asynchronously messaging with a healthcare provider with whom it is not necessary to establish a long-term provider-patient relationship or follow-up.

The proliferation of eDTCA and online pharmacies is further complicated by the growing reliance on the Internet as a primary source of health information. According to a Pew Internet survey, 72% of American users seek health-related information online, with nearly one-third reporting attempts to self-diagnose medical conditions using online sources (Fox & Duggan, 2013). This convergence of limited regulatory oversight and increased consumer engagement with online health content highlights the urgent need for a deeper understanding of consumer health behaviors and updated policies in the context of eDTCA and marketing of online prescription drugs and online pharmacy services.

Research Purpose

Despite the rapid growth of online prescription drug platforms and electronic direct-to-consumer advertising (eDTCA), there has been a limited amount of systematic research on how consumers evaluate and make decisions about purchasing prescription medications through digital channels. Key factors influencing consumer decision-making, such as source, heuristic versus systematic processing, perceived risk-benefit tradeoffs, and varying levels of health literacy, remain underexplored in the context of online pharmaceutical consumption. Furthermore, the broader outcomes of eDTCA, including both positive effects (e.g., improved access and health engagement) and negative externalities (e.g., overprescribing, misuse, and exacerbation of healthcare disparities among vulnerable populations), warrant further investigation. These gaps suggest a need to better understand the consumer experience and societal implications of online prescription marketing.

We aim to explore what drives consumers to use online pharmacies, the sources of information they seek in making decisions about online prescription drugs, the impact of eDTCA especially via social media platforms on these decisions, and consequences of online prescription use on consumer perceptions of their health outcomes and consumer relationship with their healthcare providers. More specifically, in our first study presented here, we examine consumer-expressed motivations and emotions when considering and seeking online prescription drugs, with a focus on expressions of hope.

Hope as a Theory

Hope functions as a marketable emotion that plays a critical role in shaping consumer expectations and driving demand across various industries, particularly in cosmetics, health prevention (Albinsson et al., 2025), and pharmaceuticals (MacInnis & de Mello, 2005). While fear is commonly recognized as a negative emotion triggered by the perception of threat or danger (Witte, 1992), hope is conceptualized as a positive emotion rooted in the expectation of a favorable future outcome (Cavanaugh et al., 2011). Unlike other positive emotions, such as empathy (Rösler et al., 2016), hope is unique in its complexity, often encompassing ambivalent feelings of distress, worry, and anxiety, particularly in contexts characterized by uncertainty and adversity (Halevy, 2017). In contrast to fear, which may lead to avoidance or defensive behavior (Cohen-Chen et al., 2014), hope can motivate proactive coping and collective resilience.

Therefore, hope is among the most commonly expressed emotions in everyday language. Shimanoff (1984) found that hope is frequently mentioned in daily conversations, highlighting its centrality not only in personal discourse but also in consumer behavior. In the marketplace, hope serves as a powerful motivational construct, offering the promise of transformation, fulfillment, and self-improvement, often in response to culturally constructed ideals (Givi & Olivola, 2020). However, when facing uncertainty, whether brought on by chronic illness or unmet medical needs, consumers are likely to turn to digital health platforms not only for convenience but also for emotional reassurance. Among the array of motivations driving online prescription drug consumption, hope emerges as a powerful and underexplored emotional force.

A Netnographic Study using Reddit Posts

Due to the exploratory nature of this study, we conducted a netnographic study (Kozinet, 2002), following recent data collection and analysis methods by Vestola (2025). Netnography leverages publicly available data from online forums, discussion boards, social media platforms, and other digital communities to uncover consumption patterns. By observing and analyzing naturally occurring online interactions, researchers can gain rich, contextually grounded insights into consumer experiences without the intrusiveness often associated with traditional fieldwork methods (Kozinets, 2002).

In doing so, we opted to focus on a women's health issue of prescription hormone replacement therapies (HRT) for three main reasons. First, there is a long-standing neglect of women's healthcare needs, which can prompt women to seek alternatives (Alwhaibi et al., 2019; Kristoffersen et al., 2014). Second, there has been a significant increase in women's demand for hormone replacement therapies during perimenopause and menopause in the past few years (Quinn, 2022), and third, despite the need for healthcare provider evaluation to assess and follow-up on the risks and benefits of HRT (Chakrabarti and Chakrabarti, 2023), women often resort to non-FDA approved compounding pharmacy and independent pharmacy hormone prescriptions estimated to exceed 22 million annually (Pinkerton & Constantine, 2016). Online HRT prescriptions can have detrimental health and safety risks to women

and other vulnerable populations, such as trans persons, making this context a fertile one for our study. We used Reddit as our data source, focusing on all thread posts that resulted from the search term "online HRT prescriptions." We utilized the Python Reddit API Wrapper (PRAW) to retrieve the data. The search term "online HRT prescriptions" yielded 236 total posts, averaging 30.27 comments each, resulting in a total of 7,143 comments, which reflects high consumer engagement with this topic. The top subreddits for online HRT discussions fall into two main categories: perimenopause/menopause and transgender health. In the following analysis, we focus on the preliminary findings from a thematic analysis of the 236 threads in our sample.

Preliminary Findings

The data uncover that both women in perimenopause/menopause and transgender persons consistently report profound frustration and disappointment in response to healthcare provision barriers and issues with healthcare access. Delayed appointments, financial constraints, and unreliable physicians (attrition, perceived lack of knowledge, or refusal to prescribe) generate emotional strain. These frustrations are exacerbated by physical discomfort and perceived neglect, reflecting systemic inadequacies that erode trust and create significant emotional burdens. Specifically, the data reveals a widespread sense of anxiety rooted in both personal uncertainty and broader sociopolitical threats. For many, online prescription platforms serve as a practical alternative in a system that often feels exclusionary, as in the following quotes: "My doctor won't refill my prescription unless I go see her for a full physical and blood work. I don't really have the money for this, even with insurance. Is there an online service where I can speak to a doctor and get my prescriptions?" and "Can anyone suggest great online telemedicine services for HRT prescriptions? I'm on a waiting list with a local peri/meno-friendly doc, but I think I need relief in the interim."

Women in perimenopause/menopause and transgender persons find themselves in a constrained healthcare environment, and seeking online pharmacies for HRT prescriptions becomes a pathway for agency and hope: "Does anyone know of an online clinic that will give you a standing HRT prescription" (patient seeking online HRT); "Just picked up my prescription for my first round of low dose HRT. Doing an estrogen patch (Lyllana), low dose of oral progesterone at night, and a super low dose of testosterone gel. Everything together was \$240 for a 3-month supply" (patient buying online cost-saving HRT).

According to Snyder (2002), there are three components associated with hope: 1) having goal-oriented thoughts; 2) developing strategies to achieve goals; and 3) being motivated to expend effort to achieve goals. Consumers on Reddit have goal-oriented thoughts and express motivation and determination to achieve their main goal to "get the care [they] deserve." They exhibit pathways thinking that is central to hope by seeking and discussing the various strategies they used or might use to achieve their goal, even if they have to resort to "illegal" prescriptions: "This is actually the last loophole I can think of before I consider getting my T [Testosterone] illegal." These consumers are not merely responding to systemic failures (e.g. inaccessible providers, rising costs, health policies) but are actively mobilizing hope as a resource to overcome institutional barriers, through seeking online community support, where the community is both a source of solidarity and identity affirmation (e.g., "I have really appreciated this online community;" "I support everyone in what makes them the most comfortable in their own body") and a source of information through "you should know" or "read this" type posts.

Consumers of online HRT prescriptions find the process of obtaining a prescription relatively easy, "it was way easier than I had expected to get a prescription", and often have a positive experience with the online physicians they talk to through online pharmacies: "I talked to an online doc recently (Midi [online pharmacy HRT provider]) and had a great appt with her. She was very thorough and helped me." While online HRT prescriptions offer consumers an alternative solution and a source of hope, those who seek online HRT can also encounter new challenges that they often face without the support of credentialed healthcare providers. They have to navigate communication and disclosure challenges with their traditional healthcare providers, such as in the following quote: "My regular doctor told me she isn't 'comfortable with hormones' last year, so I now see a doctor with Evernow to get my HRT prescription. I'm due for another visit with my regular doctor and don't know if I should tell her I'm on HRT or not." Consumer decisions on whether and how to manage side effects, adjust dosages, and undergo testing are often left to their personal preferences, which can sometimes contradict medical best practices. For example, one poster wants to avoid getting a mammogram, often required to mitigate HRT risks associated with breast cancer: "I signed up with a one-month membership at Evernow, only to find out they required a mammogram within 6 months, which I don't want to do. Does anyone's local doctor require this?"

Discussion

This study offers a novel theoretical contribution by integrating Hope Theory into the domain of online prescription consumption, thereby enriching our understanding of how consumers emotionally and cognitively navigate health-related decisions in digitally mediated contexts. Our application of Hope Theory repositions online prescription consumption as an act of hopeful agency rather than passive convenience. Despite systemic barriers, consumers demonstrate resilience by actively seeking pharmaceutical solutions through digital platforms, thereby circumventing traditional gatekeeping mechanisms. The pursuit of online HRT prescriptions, for instance, coupled with communal sharing of resources and experiences, illustrates how hope operates both as an emotional driver and a pragmatic cognitive mechanism for pathways thinking. For many, hope sustains motivation to achieve healthcare goals through identifying multiple solutions and recognizing that when one path becomes blocked, you can mentally shift to alternative approaches. While the determination to find healthcare solutions reflects the positive role of consumers as active agents in navigating the complex healthcare system, the overreliance on online health information and peer-to-peer knowledge sharing challenges the authority of healthcare providers and puts consumers' well-being at risk. Their hope and healthcare decision-making can make them vulnerable to a range of risks, including false online health information, the side effects of non-FDA-approved treatments, out-of-pocket healthcare expenses, and online pharmacy scams.

References

- Aikin, K. J., Swasy, J. L., & Braman, A. C. (2004). Patient and Physician Attitudes and Behaviors Associated with DTC Promotion of Prescription Drugs—Summary of FDA Survey Research Results. Food and Drug Administration. <https://www.fda.gov>
- Albinsson, P. A., Huhmann, B. A., & Burman, B. (2025). How allusion enhances consumer response to hope appeals in health messaging. *Journal of Business Research*, 191, Article 115237. <https://doi.org/10.1016/j.jbusres.2025.115237>
- Almasi, E. A., Stafford, R. S., Kravitz, R. L., & Mansfield, P. R. (2006). What are the public health effects of direct-to-consumer drug advertising? *PLOS Medicine*, 3(3), e145. <https://doi.org/10.1371/journal.pmed.0030145>
- American College of Physicians. (2006). Direct-to-consumer advertising of prescription drugs: Position paper of the American College of Physicians. *Annals of Internal Medicine*, 146(8), 605–607. <https://doi.org/10.7326/0003-4819-146-8-200704170-00155>
- Applequist, J., & Ball, J. G. (2018). An updated analysis of direct-to-consumer television advertisements for prescription drugs. *Annals of Family Medicine*, 16(3), 211–216. <https://doi.org/10.1370/afm.2220>
- Brownfield, E. D., Bernhardt, J. M., Phan, J. L., Williams, M. V., & Parker, R. M. (2004). Direct-to-consumer drug advertisements on network television: An exploration of quantity, frequency, and placement. *Journal of Health Communication*, 9(6), 491–497. <https://doi.org/10.1080/10810730490523115>
- Cavanaugh, L. A., MacInnis, D. J., & Priester, J. R. (2011). Feeling love and doing more for distant others: Specific positive emotions differentially affect prosociality. *Journal of Marketing Research*, 48(5), 855–868. <https://doi.org/10.1509/jmkr.48.5.855>
- Cohen-Chen, S., Halperin, E., Crisp, R. J., & Gross, J. J. (2014). Hope in the Middle East: Malleability beliefs, hope, and the willingness to compromise for peace. *Social Psychological and Personality Science*, 5(1), 67–75. <https://doi.org/10.1177/1948550613484499>
- Donohue, J. M., Cevasco, M., & Rosenthal, M. B. (2007). A decade of direct-to-consumer advertising of prescription drugs. *The New England Journal of Medicine*, 357(7), 673–681. <https://doi.org/10.1056/NEJMsa070502>

- Fox, S., & Duggan, M. (2013). Health online 2013. Pew Research Center. <https://www.pewresearch.org/internet/2013/01/15/health-online-2013/>
- Gellad, Z. F., & Lyles, K. W. (2007). Direct-to-consumer advertising of pharmaceuticals. *The American Journal of Medicine*, 120(6), 475–480. <https://doi.org/10.1016/j.amjmed.2006.09.030>
- Givi, J., & Olivola, C. Y. (2020). How do I like my chances (to unfold)? Why perceived scarcity and anticipated hope lead consumers to prefer increasing probabilities of obtaining a resource. *Journal of the Association for Consumer Research*, 5(4), 470–484. <https://doi.org/10.1086/709907>
- Halevy, N. (2017). Precarious hope: Situational antecedents and social consequences of hope. *Organizational Behavior and Human Decision Processes*, 139, 49–62. <https://doi.org/10.1016/j.obhdp.2017.01.005>
- MacInnis, D. J., & De Mello, G. E. (2005). The concept of hope and its relevance to product evaluation and choice. *Journal of Marketing*, 69(1), 1–14. <https://doi.org/10.1509/jmkg.69.1.1.55513>
- McCaffrey, M. (2017). Pharma companies spent \$5.6 billion on direct-to-consumer ads in 2016. *Medical Marketing and Media*. <https://www.mmm-online.com>.
- Mintzes, B. (2012). Should Canada allow direct-to-consumer advertising of prescription drugs? *Canadian Family Physician*, 58(3), 285–286. <https://www.cfp.ca/content/58/3/285>
- The Nielsen Company. (2016). The Nielsen total audience report, Q1. <https://www.nielsen.com>
- Palumbo, F. B., & Mullins, C. D. (2002). The development of direct-to-consumer prescription drug advertising regulation. *Food and Drug Law Journal*, 57(3), 423–443.
- Mintel academic. (published 2011). Pharmaceuticals consumer–U.S.–March 2011. http://academic.mintel.com/display/569299/?__cc=1. Retrieved August 17, 2017.
- Robinson, A. R., Hohmann, K. B., Rifkin, J. I., Topp, D., Gilroy, C. M., Pickard, J. A., & Anderson, R. J. (2004). Direct-to-consumer pharmaceutical advertising: Physician and public opinion and potential effects on the physician–patient relationship. *Archives of Internal Medicine*, 164(4), 427–432. <https://doi.org/10.1001/archinte.164.4.427>
- Rösler, H., Cohen-Chen, S., & Halperin, E. (2016). The distinctive effects of empathy and hope in intractable conflicts. *Journal of Conflict Resolution*, 61(1), 114–139. <https://doi.org/10.1177/0022002715569772>
- Shmerling, R. (2025). <https://www.health.harvard.edu/blog/harvard-health-ad-watch-how-direct-to-consumer-ads-hook-us-201909201968#:~:text=If%20you're%20like%20most,%2C%20flagging%20memory%20%E2%80%94%20and%20more>
- Snyder, C. R. (Ed.). (2000). *Handbook of hope: Theory, measures, and applications*. Academic Press. <https://www.statista.com/outlook/hmo/digital-health/digital-treatment-care/digital-care-management/online-pharmacy/worldwide>.
- Ventola, C. L. (2011). Direct-to-consumer pharmaceutical advertising: Therapeutic or toxic? *P and T*, 36(10), 669–684. PubMed Central: PMC3278148
- Wilkes, M. S., Bell, R. A., & Kravitz, R. L. (2000). Direct-to-consumer prescription drug advertising: Trends, impact, and implications. *Health Affairs*, 19(2), 110–128. <https://doi.org/10.1377/hlthaff.19.2.110>
- Winterich, K. P., & Haws, K. L. (2011). Helpful hopefulness: The effect of future positive emotions on consumption. *Journal of Consumer Research*, 38(3), 505–524. <https://doi.org/10.1086/659873>

Witte, K. (1992). Putting the fear back into fear appeals: The extended parallel process model. *Communication Monographs*, 59(4), 329–349. <https://doi.org/10.1080/03637759209376276>

Summary Brief

Propensity to Trust and Social Media Engagement: The Mediating Role of Belief in Content

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This study investigates how individual differences in propensity to trust influence social media engagement through the mediating role of belief in content. While trust has been widely acknowledged as essential in online interactions, limited research has linked trait-based trust dispositions to specific engagement behaviors on social platforms. Drawing on trust and consumer engagement literature, we propose that individuals high in propensity to trust are more likely to perceive social media content, whether brand- or influencer-generated, as credible and authentic. This belief, in turn, drives behavioral engagement, such as liking, commenting, sharing, subscribing, and clicking on links. We plan to develop and test a mediation model using survey data and validated scales to assess these relationships. Findings will advance theoretical understanding of trust in digital environments and offer insights for marketers seeking to tailor content strategies based on consumer trust tendencies.

Introduction

In the digital age, social media has evolved into a critical platform for marketing and customer engagement. Despite the proliferation of social media content, from brand advertisements to influencer endorsements, audiences differ significantly in how they perceive and interact with this information (Lou & Yuan, 2019). A key yet underexplored individual difference that may drive engagement behavior is one's propensity to trust, the generalized expectation that others are reliable and act with good intentions (Rotter, 1980; Mayer et al., 1995). While prior work emphasizes the importance of trust in digital environments (McKnight et al., 1998), the mechanisms through which trait-based trust dispositions influence observable digital behaviors remain theoretically fragmented (Vrontis et al., 2021; Audrezet et al., 2022). This study aims to address this gap by examining how propensity to trust impacts social media engagement behaviors through the mediating mechanism of belief in the authenticity and accuracy of social media content.

Drawing on the trust literature and consumer engagement models (Dessart et al., 2015; Han & Balabanis, 2024), this research proposes that belief in social media content, whether produced by brands or influencers, serves as a cognitive gateway between stable personality traits and behavioral manifestations of engagement, including liking, commenting, sharing, subscribing, and link-clicking.

Background

Propensity to trust reflects an individual's dispositional inclination to trust others and has been shown to influence a variety of interpersonal and organizational exchanges (Bernerth & Walker, 2009; Friend et al., 2018). In digital spaces, this disposition may translate into how individuals evaluate the credibility of unfamiliar content or actors. Research in marketing and information systems suggests that consumers with higher levels of trust propensity are more open to persuasive attempts (Han & Balabanis, 2024; Yang, 2006) and may assign higher credibility to influencers or brands encountered on social media.

Belief in content, conceptualized as the perceived authenticity, credibility, and truthfulness of online information, is crucial in shaping consumer reactions. When users believe in the content they consume, they are more likely to act upon it, whether by engaging, sharing, or purchasing (Kapitan & Silvera, 2016). Prior studies have underscored the role of perceived credibility in influencer effectiveness (Freberg et al., 2011) and highlighted that believability precedes consumer engagement (Pradhan et al., 2023). Moreover, meta-analytic work (Han & Balabanis, 2024) confirms that trustworthiness and content authenticity are significant antecedents of engagement behavior.

Finally, social media engagement, defined as consumer interaction with content through visible and measurable behaviors, serves as the focal dependent variable in this study. While prior research has categorized

engagement behaviors into passive (e.g., likes) and active (e.g., comments, shares) (Dessart et al., 2015), few have linked these behaviors to personality-based antecedents via cognitive evaluations of content.

Key Findings (Proposed)

This research proposes and plans to empirically test a mediation model in which belief in content mediates the relationship between propensity to trust and social media engagement behaviors. We hypothesize:

- H1: Propensity to trust will be positively associated with belief in social media content.
- H2: Belief in content will be positively associated with social media engagement behaviors.
- H3: Belief in content will mediate the relationship between propensity to trust and social media engagement.

Using survey-based design and validated scales (e.g., McKnight et al., 1998; Frazier et al., 2013; Han & Balabanis, 2024), we aim to collect data from active social media users. Data collection will be analyzed using mediation analysis via PROCESS (Model 4). We anticipate that individuals high in propensity to trust will report higher belief in influencer/brand content, which in turn will lead to increased engagement across various behavioral metrics.

References

- Audrezet, A., De Kerviler, G., & Moulard, J. G. (2020). Authenticity under threat: When social media influencers need to go beyond self-presentation. *Journal of business research*, 117, 557-569.
- Bernerth, J. B., & Walker, H. J. (2009). Propensity to trust and the impact on social exchange: An empirical investigation. *Journal of Leadership & Organizational Studies*, 15(3), 217-226.
- Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2015). Consumer engagement in online brand communities: A social media perspective. *Journal of Product & Brand Management*, 24(1), 28-42.
- Frazier, M. L., Johnson, P. D., Gavin, M. B., Gooty, J., & Snow, D. B. (2013). Organizational justice, trustworthiness, and trust: A multifoci examination. *Group & Organization Management*, 38(1), 39-68.
- Friend, S. B., Johnson, J. S., & Sohi, R. S. (2018). Propensity to trust salespeople: A contingent multilevel-multisource examination. *Journal of Business Research*, 83, 1-9.
- Han, J., & Balabanis, G. (2024). Meta-analysis of social media influencer impact: Key antecedents and theoretical foundations. *Psychology & Marketing*, 41(2), 394-426.
- Kapitan, S., & Silvera, D. H. (2016). From digital media influencers to celebrity endorsers: Attributions drive endorser effectiveness. *Marketing Letters*, 27(3), 553-567.
- Lou, C., & Yuan, S. (2019). Influencer marketing: How message value and credibility affect consumer trust of branded content on social media. *Journal of interactive advertising*, 19(1), 58-73.
- McKnight, D. H., Cummings, L. L., & Chervany, N. L. (1998). Initial trust formation in new organizational relationships. *Academy of Management Review*, 23(3), 473-490.
- Pradhan, D., et al. (2023). Social media influencers and consumer engagement: A review and future research agenda. *International Journal of Consumer Studies*, 47(3), 456-473.
- Rotter, J. B. (1980). Interpersonal trust, trustworthiness, and gullibility. *American Psychologist*, 35(1), 1-7.
- Vrontis, D., Makrides, A., Christofi, M., & Thrassou, A. (2021). Social media influencer marketing: A systematic review, integrative framework and future research agenda. *International Journal of Consumer Studies*, 45(4), 617-644.

Yang, K. (2006). Trust and citizen involvement decisions: Trust in citizens, trust in institutions, and propensity to trust. *Administration & Society*, 38(5), 573–595.

Summary Brief

Nurturing sustainable consumption: The influence of green rewards and religious values on green purchase behaviour

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Sustainable consumption has emerged as a cornerstone of global environmental strategies, with growing attention to consumer behaviour toward green products. While existing research predominantly explores pro-environmental behaviour through the lens of either consumers' rationality or morality. Thus, this study provides a novel perspective by investigating the impact of green rewards and religious values in shaping green consumption behaviour in India. Using data from 562 respondents in the Delhi-NCR region, the research employs covariance-based structural equation modelling and process macro for mediation and moderation analyses to test the proposed framework. The findings reveal the partial mediation of attitude towards green products and green purchase intention on the relationship between religious values and green purchase intention, as well as the relationship between religious values and green purchase behaviour. The study aligns with the United Nations Sustainable Development Goal (UN SDG) 12 on sustainable consumption and production by advancing green consumption research in diverse socio-cultural contexts.

SESSION 22.9: SIGNALS, SPACES, AND NEW CONSUMPTION ROUTINES

Moderators:

Yupal Shukla

Summary Brief

The Spillover Effects of Remote Employment into Consumption Habits

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Remote employment has been found to increase feelings of loneliness among employees, leading to a variety of company impacts (Deniz, 2019; Firoz & Chaudhar, 2022; Sasaki et al., 2025). As the body of literature on the individual as both a consumer and employee is rising, so is the importance of understanding how work impacts consumption, and how consumption impacts work. Through three planned studies in the United States, we show that the loneliness experienced by remote employees spills over into the individual's consumption habits. Specifically, we show that lonely employees seek out browsing as a form of variety seeking to help mitigate feelings of loneliness.

Introduction

As of June 2024, a Gallup survey reported that one in five workers experience loneliness, with fully remote employees experiencing significantly more (25%) loneliness than fully on-site employees (16%) (Pendell, 2024). With workplace loneliness impacting work related outcomes and turnover (Deniz, 2019; Firoz & Chaudhar, 2022; Sasaki et al., 2025), it brings up the question of what other impacts does it have on the individual consumer and their personal consumption experience? Gruen and Bardhi (2025) have stated that, “consumption and work are becoming increasingly intertwined,” and it is important to consider the individual person as a whole including both the consumer and the worker. This paper attempts to bridge the gap between the worker and the consumer by discovering the impacts remote and hybrid employment have on consumption experiences mediated by workplace loneliness.

Background

Remote employment leading to loneliness is well established in the literature, especially post-COVID. For instance, Tavares (2017) finds that telework leads to feelings of isolation and loneliness, and Miyake et al. (2021) further develop this research by finding that frequency of remote work was moderately associated with loneliness, and co-worker and supervisor support influencing the likelihood of a remote employee to have feelings of loneliness. Additional research has addressed not only the link between remote work and loneliness, but also the impacts of loneliness on work related outcomes such as job performance, creative performance and organizational citizenship behavior, and turnover (Deniz, 2019; Firoz & Chaudhar, 2022; Sasaki et al., 2025).

Consumer behavior research has also addressed the impacts of consumption on loneliness, and loneliness on consumption. For example, Wang et al. (2021) find that ritualistic consumption of perceived meaningful products reduces loneliness, while Shrum et al. (2022) show how consumers cope with loneliness through various forms of consumption. For example, loneliness may be combatted through consumption of products that signal affiliation and fosters more or deeper relationships, or consumers using products to indirectly substitute social connections (Shrum et al., 2022).

While the above research addresses how remote employment leads to loneliness and how loneliness may be mitigated through consumption of products or services, the present paper bridges the gap between remote employment and consumption habits through the spillover effect of workplace loneliness, specifically identifying in-person “browsing” as remedy to workplace loneliness. Specifically, we address the following research questions: Does percentage of remote employment increase perceived feelings of loneliness, further increasing the likelihood of pursuing compensatory consumption of browsing? Does compensatory consumption of browsing mitigate feelings of loneliness?

Grounded in the compensatory consumer behavior model, we show how consumers use consumption of browsing in-person to compensate for a self-discrepancy caused from workplace setting. Compensatory consumption is frequently used to show consumers compensate for a self-discrepancy with the consumption of goods and services (Zhang, 2022), however the compensatory consumer behavior model provides a framework for how consumer behavior is driven by self-discrepancies. We will elaborate on the compensatory consumer behavior model further in the article.

The present briefing contains three planned studies in the United States, including an exploratory Prolific survey, company survey, and Prolific experiment. The first study is an exploratory study to understand the impacts of employment location and home life conditions to explore variables that will serve as controls, and to determine consumption habits relevant to follow-up studies. The second study will address the hypothesized model fit and provide evidence for the conceptual model of the phenomenon at hand. The goal of the third study is to examine how manipulation of loneliness impacts consumption and variety seeking behaviors to provide more evidence towards causality.

References

- Deniz, S. (2019). Effects of Loneliness in the Workplace on Employees' Job Performance: A Study for Hospital Employees, *IJHSRP*, 4(3), 214-224. 10.23884/ijhsrp.2019.4.3.06.
- Firoz, M., & Chaudhary, R. (2022). The impact of workplace loneliness on employee outcomes: What role does psychological capital play? *Personnel Review*, 51(4), 1221-1247. <https://doi.org/10.1108/PR-03-2020-0200>.
- Sasaki, N., Tsuno, K., Kuroda, R., Imamura, K., Eguchi, H., Shimazu, A., & Kawakami, N. (2025). Workplace loneliness and job turnover: A 6-month prospective study. *Journal of Occupational Health*, 67(1). <https://doi.org/10.1093/joccu/huaf009>.
- Pendell, R. (2025, March 25). 1 in 5 employees worldwide feel lonely. *Gallup.com*. <https://www.gallup.com/workplace/645566/employees-worldwide-feel-lonely.aspx>.
- Gruen, A., & Bardhi, F. (2025). Consumptive Work in Coworking: Using Consumption Strategically for Work. *Journal of Consumer Research*. <https://doi.org/10.1093/jcr/ucaf009>.
- Tavares, A. I. (2017). Telework and health effects review. *International Journal of Healthcare*, 3(2), 30-36.
- Miyake, F., Odgerel, C. O., Hino, A., Ikegami, K., Nagata, T., Tateishi, S., Tsuji, M., Matsuda, S., & Ishimaru, T. (2022). Job stress and loneliness among desk workers during the COVID-19 pandemic in Japan: focus on remote working. *Environmental Health and Preventive Medicine*, 27, 33-33. <https://doi.org/10.1265/ehpm.22-00107>.
- Wang, X., Sun, Y., & Kramer, T. (2021). Ritualistic Consumption Decreases Loneliness by Increasing Meaning. *Journal of Marketing Research*, 58(2), 282-298. <https://doi.org/10.1177/0022243721993426> (Original work published 2021).
- Shrum, L. J., Fumagalli, E., & Lowrey, T. M. (2023). Coping with loneliness through consumption. *Journal of Consumer Psychology*, 33(2), 441-465.
- Zhang, Y. (2022). Variety-seeking behavior in consumption: a literature review and future research directions. *Frontiers in psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.874444>.

Full Paper

Exploring customer experience in African bars: The role of environmental triggers and social dynamics

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This research aims to investigate the conditions under which retail environment shape customer experience. Specifically, we examine the mediating role of emotional contagion and the moderating role of the visitor's companion in the African bar's context. The study is based on a sample of 1021 responses. Hypotheses are tested using structural equation models (PLS-SEM). The results reveal that environmental triggers, particularly physical and social factors enhance customer experience in African bars. Customer experience acts as mediating mechanism between the bar's environment and behavioral intentions: revisit intention and propensity to stay or consume more. Induced emotional contagion also mediate the relationship between the physical and social factors and the customer experience. However, this work does not establish the moderating influence of companions.

Introduction

Today, physical retail channels face a number of challenges, including fierce competition from other channels and changing customer expectations, which significantly threaten their footfall (Fokina, 2023; PwC, 2023; Kotler et al., 2017). To reverse the trend, these retailers sometimes take action on price or intense promotions, which can significantly reduce profits (Grewal et al., 2009). For many researchers, the growth and profitability of retail chains are also determined by other levers that make the difference (Vargo and Lusch, 2008). Indeed, value now lies in the consumer experience and not just in marketing mix variables. Companies need to focus on the customer experience (CX) as a means of exchanging win-win value between the retailer and its customers (Bolton et al., 2014; Verhoef, 2009; Grewal, 1999).

Such is the case with outlets known as “bars”, which occupy an important place in the economic, social and cultural life of African society (Bikanda, 2022; Ossebi, 1980). Often referred to as “cabarets”, “buvettes”, “snacks bars”, “bars dancing” or “bistrotts”, etc., these different names reflect different specializations, but in reality, they all blend together. These outlets play a central role in the distribution and consumption of alcoholic beverages. Although specific sales data are limited, some figures illustrate the dynamics of the alcoholic beverage market in Africa, and the importance of bars in the distribution of these products. In Cameroon, for example, statistical data obtained from the subsidiary of a multinational group indicate the sale of almost 1.1 billion liters of beverages in 2023. According to these statistics, 85% and 90% of this figure is generated by bar sales.

In some African cities, bars represent the dominant category of sales outlets. According to figures from the Cameroonian union of liquor outlet operators, there is an average of one bar for every 500 inhabitants in urban areas. These outlets reflect the economic, socio-cultural and identity-related dynamics of African societies. Bars are not just places where drinks are consumed, but also spaces for conviviality, entertainment and exchange (Bikanda, 2022; Niedzielski, 2018). Their diversity and evolution reflect the continent's social transformations, marked by cultural influences and local traditions (Bikanda, 2022). Bars are defined as outlets selling drinks “to be consumed on the premises” (Bihl-Willette, 1997) and, more figuratively, they are places where customers seek escape and collective drunkenness, this term referring not only to the substance itself, alcohol that is drunk in large quantities, but also to all the social practices and cultural meanings that surround alcohol consumption (Obadia, 2008). Customers express their experiences in bars in terms of playful pleasure, sensory pleasures, daydreams, aesthetic enjoyment and emotional responses (Holbrook and Hirschman, 1982; Pine and Gilmore, 1998). Bars are thus positioned as places of experience (Holbrook and Hirschman, 1982).

So, the questions that emerge are: how can we stimulate the customer experience in these outlets to meet consumer expectations? What are the mechanisms likely to produce favorable customer experiences in bars (Carú and Cova 2003; Arnould and Price 1993; Schouten et al. 2007). Answering these questions requires a clear understanding of the customer experience, its antecedents and consequences. However, the research literature is fragmented in its presentation of the levers that can boost customer experience at the point of sale. Structured analytical frameworks fail to take into account the specificities of the consumer context, and suffer from a lack of empirical evidence (Becker

and Jaakkola, 2020). This is true of the customer experience in bars, which is more social and emotional than other types of outlets, which are much more functional and transactional (Bitner, 1992; Pine and Gilmore, 1998). Moreover, these places of sociability and collective consumption require that contingencies such as the presence of other customers and companions be taken into account (e.g., Grove and Fisk 1992; Schouten et al. 2007). Indeed, research suggests that being (or not being) accompanied is a source of intrinsic benefits to the experience (Debenedetti, 2003). Furthermore, Didry and Giannelloni (2019) stress the importance of explicitly considering the emotional phenomena at work in a collective consumption context, precisely the way in which emotional contagion intervenes in the process. Indeed, despite the importance this variable seems to occupy in the creation of positive emotions among customers (Tombs and McColl-Kennedy, 2003), the lack of research on the impact of emotional contagion on inter-customer affect in retail environments is astonishing. In an attempt to fill this gap, our research investigates the dynamics around stimuli in the retail outlet environment and their effect on the customer experience in bars consumption venues. It raises further questions, such as: by what mechanism does a visit to a retail outlet stimulate customers' consumption experience? This question also raises the question of possible mediating variables, such as the emotional contagion induced in these hedonic and collective consumption venues, which may influence the relationship between environmental stimuli and the customer experience. Or does the experience depend on an interaction partner?

Our research adopts an approach based on the exploration and confirmation of variables (Churchill, 1979). First, the conceptual framework is presented, leading to a conceptual model followed by the formulation of research hypotheses. Then, the chosen methodology, implementing an empirical study based on 1027 respondents, is detailed. Following the testing of the research hypotheses, the results of this work are presented. Finally, the theoretical and practical implications of this research are analyzed, while highlighting its limitations and avenues for future research.

Literature review

Theoretical framework

Since the seminal work of Holbrook and Hirschman (1982), customer experience has been a field of research gaining ground, with the increasing complexity of customer interactions across myriad providers and touchpoints as well as multiple consumption contexts (De Keyser et al. 2020; Lemon and Verhoef 2016). In addition, each scientific discipline has derived its own conception, from social psychology to design to the ergonomics of human/machine interaction (Gahler et al., 2022), adding to an already multiple range of meanings. However, despite this plethora of literature, customer experience remains used in a fragmented way (Becker and Jaakkola, 2020). To reconcile the different approaches, some authors propose to understand customer experience as non-deliberate, spontaneous responses and reactions to particular stimuli (Becker and Jaakkola, 2020; McColl-Kennedy et al. 2019).

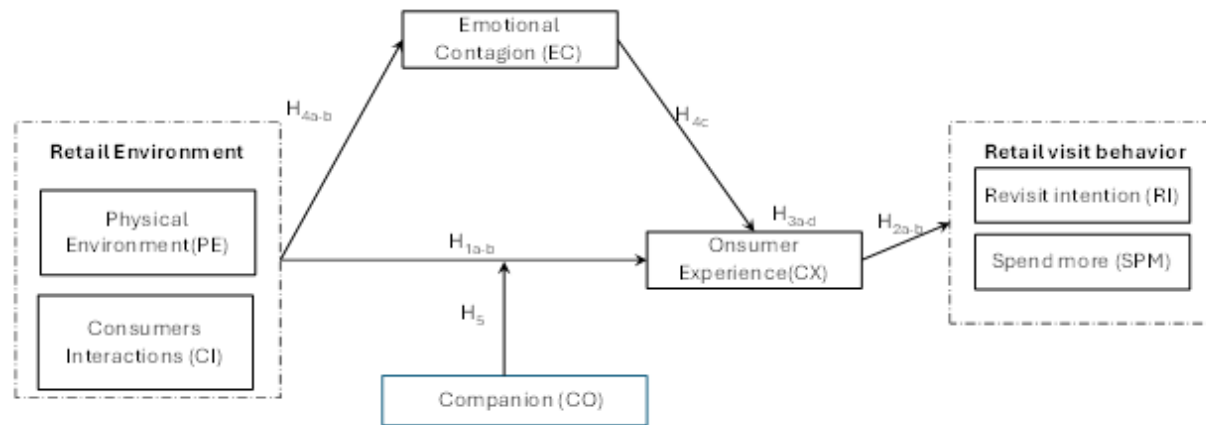
These responses represent the sum total of feelings, perceptions and attitudes created during successive stages of the consumption process, resulting from a series of interactions between a customer and a service provider (Jain, Aagja and Bagdare, 2016; Gentile et al., 2007). The theoretical foundation of customer experience is rooted in the work of Mehrabian and Russell (1974), Holbrook and Hirschman (1982), the work on the economics of experience by Pine and Gilmore (1999), the co-creation experiences of Prahalad and Ramaswamy (2004) and the dominant service logic of Vargo and Lusch (2008). Mehrabian and Russell (1974) offer an early understanding of the emotional response to environmental stimuli. Holbrook and Hirschman (1982) focus on the hedonic dimension of experience, evoking the idea that the customer has an experience that transcends the simple transaction. The customer thus becomes an active participant in the construction of his or her own experience. Pine and Gilmore (1999) reinforce this perspective by putting forward the concept of the experience economy, in which the customer's active interaction with the product or service is a major source of differentiation. For Prahalad and Ramaswamy (2004), the customer is a co-creator of value, enabling offers to be customized and adapted to users' specific needs.

Vargo and Lusch (2004, 2008) go even further, integrating into the value-creation system all interactions between players, including the customer, the service provider and other stakeholders in the ecosystem. These authors converge around the idea that the customer experience is the result of a multifaceted interaction between the individual and the environment. Table 1 summarizes previous work on the main integrative models of customer experience

Table 1: Main integrative customer experience models

Authors	Dimensions	Antecedents	Consequences	Contingencies
Gahler et al. (2023)	Affective, Cognitive, Physical,	Interaction with an experience partner (Brand,	Attitudinal consequences	Context (Individual

	Relational, Sensorial, Symbolic	employee, others consumers) at a touchpoint (online, offline) in a customer journey stage (Prepurchase, Purchase, Post purchase).	(attitudes, customer satisfaction), behavioral outcomes (word of mouth, loyalty, revisit behavior)	Social Market Environmenta)
<i>Becker & Jaakkola (2020)</i>	Responses (cognitive, affective, physical, sensorial, social)	Stimuli within and outside firm-controlled touchpoints– Dynamic interplay between stimuli	Perceived quality, satisfaction, Value- in-use	Consumer, situational, sociocultural contingencies
<i>De Keyser et al. (2020)</i>	Participation Level Dimensionality (Emotional Cognitive Sensorial Social Behavioral); Time flow Ordinariness	Touchpoints (Firm- controlled Non-firm controlled); Nature (Human, Physical, Digital); Stage (Prepurchase, Purchase Post purchase)	Satisfaction, loyalty, perceived effort and experience	Context (Individual Social Market Environmenta)
<i>Homburg et al. (2017)</i>	Functional, mechanic, aesthetic	Quality of service environment	Emotions, satisfaction, engagement, WOM	Channel type, omnichannel consistency
<i>Lemon & Verhoef (2016)</i>	Cognitive, affective, behavioral, sensorial, and social responses to a firm's offerings	Customers interaction through myriad touchpoints: brand-owned, partner- owned, customer-owned, social /external/independent and in different stages of the journey	Engagement, usage, Conversion rates, long-term loyalty (e.g., re purchase, retention), Market metrics	contexts, situations, and industries
<i>Klaus et Maklan (2013)</i>	Peace of mind, Moments-of-truth, Outcome focus, Product experience	Customer-company interaction, subjective context	Loyalty intentions, Customer satisfaction, Word- of-mouth behavior	Context, hedonic consumption services
<i>Verhoef et al. (2009)</i>	Cognitive, affective, social, physical	Social environment, Service interface (persons, technologies, co-creation), atmosphere, Assortment, price, Retail brand.	Firm performance	demographic, Customer attitude, type of store, location
<i>Grewal et al. (2009)</i>	Affective, Cognitive, Physical, emotional, social	Firm controlled factors (promotion, price, merchandise, supply chain and location)	Marketing and financial metrics	n.a



Conceptual model and research hypotheses

Figure 1: Theoretical model

Antecedents of customer experience

The overall conceptual foundation of our hypotheses derives from a number of theories. Inference theory (Huber and McCann 1982; Nisbett and Ross 1980), action possibility theory (Gibson, 1979), relational schema theory (Fiske, 1992). Together, these theories imply that consumers are attentive to social design cues and ambient environmental cues when evaluating retail outlets. Indeed, these cues offer reliable information about product attributes, price and the overall shopping experience (Bitner 1992). The physical environment includes the layout of furniture and equipment, spatial arrangements, ambient elements and cultural resources, which are signs and symbols that invite customers to engage in the service encounter (Bitner, 1992). The physical environment influences consumer behavior, and the way in which these cues act depends on context (Bitner, 1992). Engineering and design research has addressed human physiological responses to environmental conditions, as well as physiological responses to equipment design (Bennett 1977; Osborne 1987; Bitner, 1992). For example, the relative comfort of seats in a restaurant influences how long people stay.

When customers feel uncomfortable, they will tend to leave within a predictable period of time (Hart and Dale, 2014). In the context of African drinking establishments, the design of the physical space inside and outside bars in Cameroon is often a function of the staging created to elicit desired cognitive, emotional and behavioral responses (Bikanda, 2022). According to this author, any social actor may or may not become involved in seduction activities in a bar by choosing an area according to the other social actors and the meaning he or she gives to the messages addressed to these actors. Furthermore, customers can affect each other during interactions in a retail environment (Baker 1987; Bitner 1992). This is achieved through the different roles that each customer can assume (McGrath and Otnes, 1995). Encouraging such exchanges can therefore be rewarding for the company. It also suggests using customers as part-employees, to disseminate useful knowledge to customers and influence their experience. Companies can take advantage of well-informed customers to help other customers (Tombs and McColl-Kennedy, 2003). Moreover, verbal customer interaction often takes on a substitute role to the sales efforts of service employees (Baron et al., 1996; Davies et al., 1999; Harris et al., 1995) and can have a considerable impact on customer satisfaction and perceptions of service quality (Martin, 1996). We argue that consumers perceive the bar environment holistically, and that consumer responses to physical and social stimuli depend on ensemble effects. We formulate the following hypothesis: *H1: Retail environment positively influences the customer experience (H1a-b).*

Consequences for customer experience

Research into the retail environment has shown that store-induced affect has a direct effect on customers' behavioral responses (Dawson et al., 1990; Donovan and Rossiter, 1982; Hui et al., 1997; Wakefield and Baker, 1998). Zeithaml et al (1996) measure behavioral intentions along five main dimensions, grouped into favorable and unfavorable intentions. Favorable intentions include positive word-of-mouth, recommendations, intention to increase loyalty, propensity to pay more or to pay a premium price. We believe these variables are fundamental to the performance of bars, the propensity to consume more or stay longer is also evoked in research on visits to leisure venues (Debenedetti, 2003) and shopping malls (Das and Varshneya 2017; Helme Falk and Bertil, 2017). The pleasure

or excitement induced by visiting the store, would be positively associated with time spent in the store, willingness to buy, willingness to return and willingness to interact with others (Donovan and Rossiter, 1982; Wakefield and Baker, 1998), positive recommendations and word-of-mouth (Hui et al., 1997). On the basis of these arguments, we formulate the following hypotheses: *H2: Customer experience positively influences retail visit behavior (H2a-b).*

Mediating and moderating variables

Customer experience as mediator. The literature review shows that customer experience arises and exists through the interaction of a customer with an experience partner (Becker and Jaakkola 2020). Customer experience dimensions mediate between the actions of an experience partner and their consequences (Gahler et al., 2022; Grewal, 2009). We therefore formulate the following hypothesis: *H3: Customer experience mediates the relationship between retail environment and retail visit behavior H3a-d).*

Our research also analyzes the effect of the social context in which the visit to the outlet takes place. Specifically, emotional contagion or the presence of a companion could affect the relationship between environmental stimuli and customer experience (Tombs and McColl-Kennedy, 2003).

Emotional contagion. According to Hagen and Bryant (2003), the design of environments plays a role in facilitating emotional contagion. For example, a design that favors social interaction encourages the sharing of emotions between participants (Tschan, Rochat, & Zapf, 2005). The social interactions that take place in bars create conditions conducive to emotional contagion. The question is whether emotional contagion can regulate the relationship between environmental stimuli (physical and social) and the customer experience. Several studies have shown that a positive emotional climate, created by employees transmitting positive emotions to customers (Hochschild, 1983; Sutton, 1991; Sutton and Rafaeli, 1988). Pugh (2001) shows that positive emotions displayed by employees are correlated with the customer's positive affective state and subsequent positive evaluation of service quality. Consequently, when customers interact with each other, consciously or unconsciously, their affective state is likely to be influenced by the emotions displayed by their peers (Tombs et al., 2003). We formulate the following hypothesis: *H4: Emotional contagion mediates the relationship between the retail environment and customer experience. Retail environment promotes emotional contagion (H4a-b) which in turn stimulates the customer experience (H4c).*

The role of the companion. The term "companion" in this context refers to those who accompany a primary consumer during their visit to the outlet, helping them to make purchasing decisions (Borges et al., 2010). Consumers usually visit drinking establishments with friends, family or colleagues. In the context of recreational activities, entertainment often seems to be associated with an emphasis on companionship (Debenedetti, 2001). The question that arises is whether the presence of a companion helps to stimulate the customer experience in bars? There is a link between the presence of companions and the individual benefits sought, and the benefits derived from this accompaniment will shape consumers' experiential experience. (Allen and Donnely, 1985; Buchanan, Christensen and Burdge, 1981; Heywood, 1987). In addition to the motives of affiliation or socialization between loved ones, inherent in any shared leisure experience, the presence of companions contributes to the feeling of comfort and pleasure during the visit to the point of sale (Borges et al., 2010). What's more, the presence of companions has a direct effect on consumers' positive emotions (Wenzel and Benkenstein, 2018), enhancing the overall customer experience and satisfaction (Borges et al., 2010; Hart and Dale, 2014). Accompaniment proves to be directly integrated into the customer's experiential experience, and the presence of a companion positively influences the atmosphere in which pleasure and social contact, are sought (Wong et al., 2012). What's more, visiting a sales space with friends or family members can also affect the customer experience (Tombs and McColl-Kennedy, 2003). We therefore formulate the following hypothesis: *H5: The visitor's companion moderates the relationship between retail environment (physical and social) and the customer experience.*

Research methodology

To test the proposed model, an empirical study (exploratory and confirmatory) was carried out with bars customers. The methodological choices made take into account the various debates on variable measurement (Gerbing and Anderson, 1988; Churchill, 2009).

Study context

This study was carried out in Cameroon, in the context of bars. Bars are sales outlets whose frequentation may be perceived as a familiar act of relaxation, leisure or the simple act of buying or consuming a drink. Yet these

are special places where forms of sociability take place that do not occur in the same way in other types of outlets (Niedzielski, 2018). Indeed, although these places do not have the exclusive right to sell drinks, which can be bought and drunk elsewhere, bars are places of sociability and conviviality which, for some authors, are institutions in which political, sporting and social events are debated, places of comment and rumor (Ossebi, 2008). In Africa, bars are places of interaction between those present who share an experience, where excess, prohibitions and a disposition to joy are produced and form part of the very nature of the place (Bikanda, 2022).

In the context of bars in Cameroon, alcohol consumption is linked to rituals, social norms and perceptions of identity (Bourdieu, 1984), fostering social interaction (Heath, 2000). On the other hand, the alcohol consumed in bars is not just a drink, but also a social and cultural symbol. According to Douglas (1987), drinking is a practice framed by implicit rules and collective beliefs. Moreover, people become more comfortable with reduced social and physical distance (Alnabulsi and Drury, 2014; Novelli, Drury, Reicher, and Stott, 2013). Bikanda (2022) refers to the ritual of "empty" bottles on tables as distinctive signs of drinking among young people in Cameroon. Unwinding for hours on end is reminiscent of the phenomenon of binge drinking, which is practiced by young people in the West and refers to the consumption of alcohol compulsive, excessive and limited in time. It's a way of partying unconsciously, allowing young people to cut themselves off from the harsh realities of everyday life for a while. Spradley and Mann (1979) consider drinking and talking to be inseparable, providing a way out of the insecurity and anxiety of being alone in a crowd. Drinking is also thought to affect and facilitate social exchanges" (Spradley and Mann, 1979). The interaction between so many people presents in these places, who share a common experience, represents a place of reciprocal discovery. The ritual of access gives drinkers the feeling of being among themselves, among beer-drinkers (Bikanda, 2022). These links are expressed through rites and rituals, which can be used to describe communities of practice (Ossebi, 1988). The rounds offered are a form of social solidarity, while refusal to drink may be seen as a break with the group norm. The literature also refers to the seduction activities sometimes fostered by tenants, which take place in these outlets between so-called "free" men and women (including waitresses) as a form of sociability that reinforces interactions (Bikanda, 2022). This sociability refers to three values that call for privileging social ties, encouraging contacts and maintaining relationships (Picard, 2007). These values need to be analyzed in an attempt to grasp the forms of sociability and interaction that make the Bars unique framework.

Data collection

To collect the data, a questionnaire was designed and tested on a sample of 50 individuals. The questionnaire was administered face-to-face at the point of sale by trained interviewers, to obtain responses under real-life conditions. In line with previous research, we measure customer experience retrospectively. Retrospective measures are guided by the idea that what customers remember is what guides their behavior (e.g. Brakus et al. 2009; Kuehnl et al. 2019). Respondents were selected randomly by interviewing them on their way out or in a consumption situation to ensure a good representativeness of the sample. Respondents had to be at least 18 years old and responsible for beverage purchases. To ensure a wide range of respondents, the survey was carried out over an entire month in the country's two main urban centers (Yaoundé and Douala). The choice of cities was based on a desire to work with a comparable urban population in terms of consumption habits and social class (diversified). The collection process produced a valid sample of 1021 respondents, randomly divided into two sub-samples (N Exploratory = 300; N Confirmatory = 721). The sample is diversified in terms of gender, age, socio-professional category, monthly family income and level of education (see Table 2). There was also a balanced distribution of respondents across classes. Finally, an analysis of frequentation habits reveals a high level of familiarity with bars. Indeed, the frequency of visits to the bars analyzed is relatively high: several times/ week:27.7%; once/month: 24.4% and a few times/ months: 39.7%.

Table 2: Sample characteristics

Demographic	Categories	Sample 1	Sample 2
Age group (years)	18–35	56,2	70
	36–53	40,6	27
	54+	3,2	3
Highest educational level	Primary	6,0	12,5
	Secondary	30,9	32,6

Monthly income (US\$)	University 1st or 2nd cycle	24,6	27,6
	University 3rd cycle or higher	38,5	27,3
	Low (< \$65)	49,5	58,8
	Medium (\$66–\$700)	47,3	37,4
	High (>\$701)	2,5	3,7
Gender	Male	77,6	61,4
	Female	22,4	38,6

Measuring variables

The instruments used to measure the constructs were adapted from previous work, taking into account the different definitions used for each concept. In addition, an exploratory qualitative study conducted with 24 consumers and 8 bars managers/leaders) helped to refine/select the scales. Items measuring constructs were evaluated on a five-point Likert scale ranging from 1 "Strongly disagree" to 5 "Strongly agree". Variables were measured using scales adapted from previous work and validated in our study context (Rossiter, 2002).

To measure the environment of drinking establishments, we used a multidimensional approach in line with previous work (Bitner, 1992; Kim and Moon, 2009, Tombs and McColl-Kennedy, 2003), which we adapted to the context of our study in line with the results of the qualitative study (Gahler et al., 2023). Similarly, we adopted a multidimensional approach to measuring customer experience, in line with previous work. The scales used are adapted from Gahler et al. (2022), and Gentile et al. (2009). The Gahler et al (2022) scale comprises eighteen (18) items divided into six (6) dimensions: physical, affective, relational, cognitive, symbolic and sensory. However, the differentiation between the sensory and physical dimensions is not reflected in our qualitative results. The same is true of the cognitive dimension, which does not appear in our results. To confirm the robustness of our conceptualization, we first conducted an exploratory factor analysis. The four-factor solution resulting from this analysis supports our conceptualization of the customer experience, in line with our theoretical reasoning and qualitative findings. As Gahler et al (2023) point out, even if measurement scales seem to work in one context, researchers need to invest effort in testing them in new application contexts. To measure emotional contagion the work of Mehrabian and Epstein (1972) is used, adapting the six items of Petitta and Naughton's (2015) scales. The companion scale is adapted from the work of (Arnold and Reynolds, 2003). This choice is explained by the study context associated with retail outlets. The scales of revisit intention and propensity to consume or stay longer in the context of drinking establishments are adapted from the work of Zeithaml et al. (1996). The selected dimensions have been validated (Churchill, 2009).

Research results

Preliminary analyses (using SPSS 21) were carried out for descriptive analyses and to ensure that the measurement scales were adapted to the research context. They also ensured that there were no missing values or extreme values likely to bias the estimates. In order to verify the validity and reliability of the measurement instruments used, exploratory factor analyses (using CFA) were carried out on an exploratory sample (N = 300). The data were then analyzed using a structural equation modeling approach (PLS-SEM), which we felt was appropriate for our study. Our analysis includes evaluation of the measurement model and assessment of the structural model (Hair et al., 2019). Table 3 shows all latent variables, items and their fit indices.

Measurement model assessment

Before conducting the SEM, several assumptions were verified—specifically, common method bias, endogeneity, and multicollinearity (Hair et al., 2022). When data is collected using the same scale, respondents may produce correlated answers due to scale proximity and similarity. To test for this potential bias, Harman's single-factor method was applied. The analysis showed that the largest variance explained by a single factor was 29.3%, well below the 50% threshold (Mishra, Kesharwani, & Das, 2016), indicating no significant common method bias.

Endogeneity was assessed using the Gaussian Copula test (Muhammad et al., 2021), conducted in Smart PLS version 4. All p-values were above 0.05, suggesting no endogeneity in the structural model and supporting the

assumption of predictor exogeneity. Multicollinearity was also ruled out, as all VIF values were below the cut-off value of 5 (Hair et al., 2019).

A component-based SEM analysis was performed using SmartPLS 4 and included two phases: (1) evaluation of the measurement model—also known as confirmatory composite analysis (CCA), and (2) analysis of the structural model (Hair et al., 2024). Following previous research (Bustamante & Rubio, 2017; Gahler, Klein, & Paul, 2023), the constructs for physical environment, customer interactivity, and customer experience were modeled as second-order formative constructs. This structure was further supported by the confirmatory tetrad analysis (CTA), which yielded significant results ($p < 0.05$), indicating that the sub-constructs within each higher-order construct were distinct and independent.

Given the second-order nature of the conceptual model, both first- and second-order measurement models were assessed. To evaluate reliability at the first-order level, Cronbach's alpha and composite reliability scores were calculated. Reliability, defined as the internal consistency of a scale (Pallant, 2010), was confirmed with values above the 0.7 threshold. Convergent validity, which reflects whether items converge on the same construct (Byrne, 2010), was supported by average variance extracted (AVE) values exceeding 0.5. Detailed results on the reliability and convergent validity of the first-order model are presented in Table 3.

Table 3. Reliabilities, indicator loadings, and multicollinearity measurement

Constructs		Outer Loadings	VIF
Interactions C/C: $\alpha = 0.773$; $Rho = 0.775$; $CR = 0.845$; $AVE = 0.589$			
CICC_1	I enjoy spending time with friends in this bar.	0.813	1.499
CICC_2	The atmosphere in this bar encourages interaction with my companions	0.848	1.660
CICC_3	The atmosphere in this bar encourages interaction with my companions.	0.826	1.633
Interactions C/E: $\alpha = 0.826$; $Rho = 0.827$; $CR = 0.878$; $AVE = 0.589$			
CICE_1	I feel a warm atmosphere when I interact with the staff.	0.788	1.880
CICE_2	The bar staff go out of their way to interact with customers.	0.784	1.754
CICE_3	Interaction with employees creates a warm atmosphere.	0.763	1.715
CICE_4	I feel comfortable interacting with the staff at this bar.	0.763	1.698
CICE_5	The friendliness of the staff encourages me to spend time there.	0.739	1.432
Companion: $\alpha = 0.865$; $Rho = 0.866$; $CR = 0.897$; $AVE = 0.553$			
CO_1	The presence of my partner increases my pleasure.	0.787	2.041
CO_2	I feel a stronger social connection.	0.760	1.811
CO_3	Positive, memorable memories are created.	0.762	1.809
CO_4	I enjoy it more when I'm accompanied.	0.733	1.792
CO_5	I enjoy my evening at the bar more.	0.748	1.715
CO_6	I feel more satisfaction and happiness.	0.704	1.591
CO_7	I feel more energetic and enthusiastic at the bar.	0.711	1.605
Affective experience: $\alpha = 0.766$; $Rho = 0.768$; $CR = 0.851$; $AVE = 0.589$			
CXAF_1	This bar gives me a feeling of relaxation and well-being.	1.000	1.705
CXAF_2	The staff contribute to a warm and friendly atmosphere.	1.000	1.401
CXAF_3	I feel happy and enthusiastic in this bar.	1.000	1.640
CXAF_4	I find that this bar offers a unique and original experience.	0.809	1.343
Relational experience: $\alpha = 0.826$; $Rho = 0.828$; $CR = 0.873$; $AVE = 0.535$			
CXRE_1	I feel part of a community	0.738	1.580

CXRE_2	I've established a personal relationship with new people.	0.795	1.616
CXRE_3	I dance actively during my stay in this bar.	0.724	1.491
CXRE_4	The presence of other customers provides pleasant physical sensations.	0.736	1.631
CXRE_5	I am active in a way that I enjoy.	0.746	1.534
CXRE_6	I feel a connection with the customers in this bar.	0.705	1.568
Sensorial experience: $\alpha = 0.767$; $Rho = 0.768$; $CR = 0.851$; $AVE = 0.589$			
CXSE_1	The cleanliness and maintenance of the facilities have an impact on my sensations.	0.754	1.601
CXSE_2	The colors and decoration of this bar excite my senses.	0.705	1.459
CXSE_3	The layout and furnishings have a positive sensory appeal for me.	0.739	1.427
CXSE_4	The bar's soundscape has a positive impact on my senses.	0.790	1.459
Symbolic experience: $\alpha = 0.849$; $Rho = 0.851$; $CR = 0.888$; $AVE = 0.570$			
CXSY_1	Contact with this bar has a special meaning for me.	0.749	1.592
CXSY_2	Visiting this bar evokes something special for me.	0.755	1.841
CXSY_3	Contact with this bar evokes positive thoughts in me.	0.774	1.737
CXSY_4	Visiting this bar is in line with my self-image.	0.720	1.943
CXSY_5	Visiting this bar is in line with my lifestyle and values.	0.788	1.634
CXSY_6	Contact with this bar reinforces my personal beliefs.	0.768	1.583
Emotional contagion: $\alpha = 0.760$; $Rho = 0.759$; $CR = 0.839$; $AVE = 0.510$			
EC_1	If my companions are happy, I feel even happier	0.798	1.490
EC_3	The excitement of other customers fills my mind with happy thoughts.	0.730	1.404
EC_4	The lively conversations around me make me happier.	0.724	1.344
EC_5	Seeing people dancing and having fun makes me want to do the same.	0.731	1.414
EC_6	Being surrounded by relaxed, serene customers puts me at ease.	0.715	1.377
Physical functional: $\alpha = 0.719$; $Rho = 0.723$; $CR = 0.826$; $AVE = 0.544$			
PEFU_1	Good quality/price ratio	0.701	1.281
PEFU_2	Availability of drinks (variety and quality...)	0.723	1.467
PEFU_3	Accessibility (ease of access, parking...) adequate	0.700	1.415
PEFU_4	Clean and hygienic accessories (tables, glasses, etc.)	1.000	1.361
Physical ambience: $\alpha = 0.794$; $Rho = 0.795$; $CR = 0.859$; $AVE = 0.549$			
PESE_1	Pleasant decor	1.000	1.699
PESE_2	Comfortable, welcoming furnishings and fittings	1.000	1.691
PESE_3	Comfortable temperature	0.676	1.452
PESE_4	Appropriate lighting (colors, intensity, etc.)	0.780	1.478
PESE_5	Adequate hygiene and cleanliness of facilities	0.765	1.374
Revisit Intention: $\alpha = 0.849$; $Rho = 0.549$; $CR = 0.892$; $AVE = 0.624$			
RI_1	The experience makes me want to come back regularly.	0.725	1.886
RI_2	The probability of returning to this bar is high.	0.782	1.720
RI_3	I will continue to frequent this bar as often as possible.	0.784	1.797
RI_4	I intend to frequent this bar regularly.	0.705	1.789
RI_6	This bar is my first choice for a future outing.	0.725	1.722

Spend More: $\alpha=0.814$; $Rho=0.814$; $CR=0.877$; $AVE=0.642$			
SPM_1	I tend to drink more than usual.	0.705	1.905
SPM_2	I feel the urge to interact with staff and other customers.	0.808	1.623
SPM_3	I tend to spend more money than expected in this bar.	0.776	1.563
SPM_4	I tend to spend more time or stay up late in this bar.	0.789	1.684

Discriminant validity was assessed using the Heterotrait-Monotrait (HTMT) ratio. As presented in Table 4, none of the HTMT values exceed 0.9, indicating that the first-order constructs are sufficiently distinct from one another (Hair et al., 2019).

	AF	PESE	CO	CICC	CICE	EC	PEFU	SPM	RE	RI	SE	SY
Affective (AF)												
Ambience (PESE)	0.623											
Companion (CO)	0.641	0.504										
Consumer/Consumer (CICC)	0.718	0.657	0.717									
Consumer/Employees (CICE)	0.715	0.589	0.608	0.755								
Emotional Contagion (EC)	0.724	0.553	0.700	0.654	0.616							
Functional (PEFU)	0.591	0.757	0.489	0.553	0.559	0.533						
Spend More (SPM)	0.539	0.393	0.405	0.393	0.465	0.370	0.380					
Relational (RE)	0.806	0.479	0.460	0.506	0.569	0.543	0.437	0.735				
Revisit Intention (RI)	0.664	0.452	0.509	0.533	0.464	0.469	0.449	0.791	0.648			
Sensorial (SE)	0.892	0.654	0.547	0.572	0.611	0.595	0.547	0.541	0.778	0.663		
Symbolic (SY)	0.657	0.454	0.370	0.424	0.482	0.422	0.408	0.708	0.782	0.725	0.710	

Table 4. HTMTmatrix.

Table 5. Fornell Larcker criterion matrix.

	AF	PESE	CO	CICC	CICE	EC	PEFU	SPM	RE	RI	SE	SY
Affective (AF)	0.767											
Ambience (PEAM)	0.486	0.741										
Companion (CO)	0.524	0.417	0.744									
Consumer/Consumer (CICC)	0.554	0.514	0.586	0.829								
Consumer/Employees (CICE)	0.571	0.479	0.518	0.607	0.768							
Emotional Contagion (EC)	0.554	0.429	0.566	0.500	0.489	0.714						
Functional (PEFU)	0.440	0.577	0.387	0.415	0.434	0.394	0.738					
Spend More (SPM)	0.424	0.316	0.341	0.312	0.385	0.292	0.289	0.801				
Relational (RE)	0.641	0.389	0.391	0.406	0.476	0.433	0.339	0.604	0.731			
Revisit Intention (RI)	0.537	0.372	0.437	0.432	0.392	0.378	0.349	0.657	0.544	0.790		
Sensorial (SE)	0.684	0.511	0.446	0.442	0.491	0.455	0.408	0.427	0.620	0.537	0.767	
Symbolic (SY)	0.529	0.375	0.319	0.346	0.409	0.342	0.319	0.589	0.657	0.616	0.575	0.755

After confirming the reliability and validity (both convergent and discriminant) of the first-order measurements, the second-order constructs were also tested for validity. Convergent validity was assessed using redundancy analysis (see Table 6), while discriminant validity was evaluated through a collinearity test (Piaw, 2023).

Table 6. Redundancy analysis

	Original sample (O)	P values	Conclusion
Physical Environment (formative) -> Physical Environment (reflective)	0.856	0.000	Convergent validity of the second-order construct supported
Customer interactivity (formative) -> Customer interactivity (reflective)	0.868	0.000	Convergent validity of the second-order construct supported
Customer interactivity (formative) -> Customer interactivity (reflective)	0.753	0.000	Convergent validity of the second-order construct supported

Redundancy analysis supports the convergent validity of the three formative constructs. The regression coefficients between the formative and reflective measurements are both significant ($p < 0.05$) and exceed the 0.7 threshold. Additionally, where applicable, factor loadings are above 0.1 and statistically significant (Wong, 2019). there are no multicollinearity issues among the variables, as all VIF values are below the recommended threshold of 3.3 (Piaw, 2023). With the validity of both first- and second-order measurements confirmed, these constructs can be confidently used to test the study's hypotheses.

Evaluation of the structural model

The results indicate that both the physical environment ($\beta = 0.214$, $p < 0.001$) and consumer interactions ($\beta = 0.348$, $p < 0.001$) have a significant positive effect on customer experience ($R^2 = 0.500$). Thus, Hypotheses H1a and H1b are supported. In turn, customer experience positively influences the intention to revisit the bar ($\beta = 0.618$, $p < 0.001$; $R^2 = 0.463$) as well as the propensity to stay longer or spend more ($\beta = 0.549$, $p < 0.001$; $R^2 = 0.437$), confirming Hypotheses H2a and H2b.

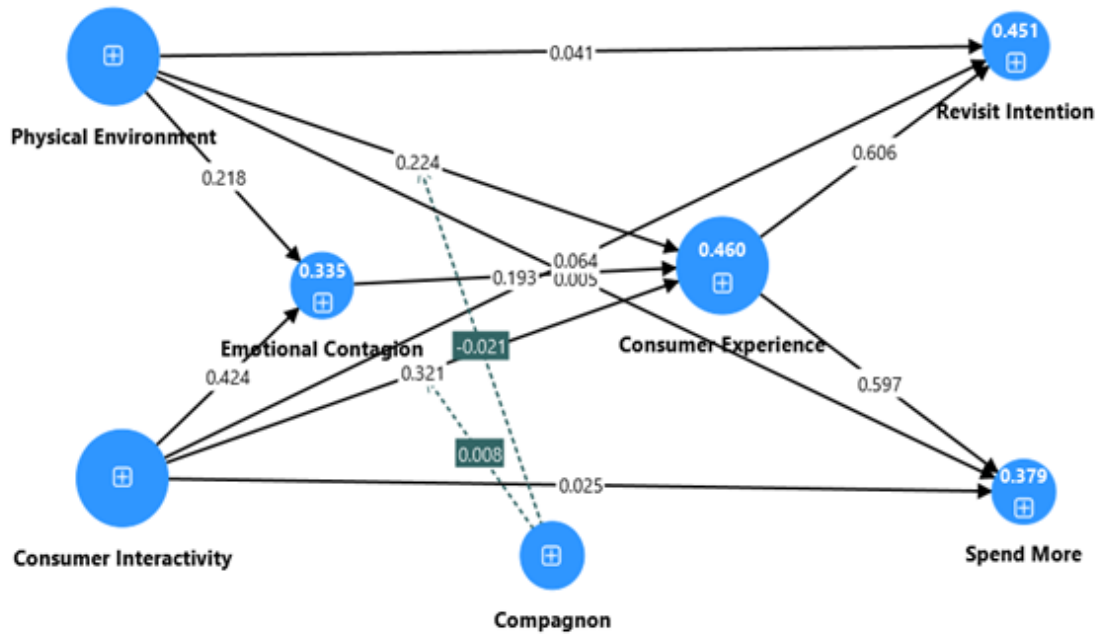
To test for mediation effects, both direct and indirect paths were examined using a bootstrapping procedure with 5,000 iterations (Zhao et al., 2010). The results show that customer experience fully mediates the relationship between the physical environment and intention to revisit ($\beta_{\text{indirect}} = 0.132$, $p < 0.001$), and between customer interactivity and intention to revisit ($\beta_{\text{indirect}} = 0.215$, $p < 0.001$). Hypotheses H3 is therefore supported. The full mediation is confirmed by the non-significant direct effects of physical environment ($\beta = 0.025$, $p > 0.05$) and customer interactions ($\beta = 0.069$, $p > 0.05$) on revisit intention. In other words, the impact of physical environmental stimuli and interactions on revisit intention operates entirely through customer experience. Similarly, customer experience mediates the effects of the physical environment ($\beta_{\text{indirect}} = 0.118$, $p < 0.001$) and customer interactions ($\beta_{\text{indirect}} = 0.191$, $p < 0.001$) on the propensity to spend more. The mediation between physical environment and spending is full, as the direct effect is non-significant ($\beta = 0.073$, $p > 0.05$). In contrast, the mediation involving customer interactions is partial, as its direct effect on spending remains significant ($\beta = 0.096$, $p < 0.05$).

Regarding the mediating role of emotional contagion in the relationship between physical environment, customer interactions, and customer experience, the findings show significant indirect effects: $\beta_{\text{indirect}} = 0.037$ ($p < 0.05$) for physical environment and $\beta_{\text{indirect}} = 0.087$ ($p < 0.001$) for customer interactions. These are partial mediations, as the direct effects of both predictors on customer experience remain significant (physical environment: $\beta = 0.214$, $p < 0.001$; customer interactions: $\beta = 0.348$, $p < 0.001$). This indicates that both factors influence customer experience directly and indirectly through emotional contagion. Hypotheses H4 is supported.

However, the moderation hypotheses (H5), which proposed that companion moderates the effects of retail environment on customer experience, were not supported, as the interaction terms were not statistically significant ($p > 0.05$).

The results of the structural model are depicted in Figure 2.

Figure 2: structural model



Discussion, implications, limitations and avenues of research

This study explores the mechanisms by which the outlet environment stimulates customer experience on the one hand, and the influence of customer experience on revisit behavior on the other. This process leads to the demonstration that the customer experience is stimulated when a consumer interacts with the physical and social environment of a bars, its staff and its practices (Hui and Bateson 1991; Kerin et al., 2002). The proposed theoretical model is tested in a context of playful and collective consumption of bars in an urban environment in Cameroon. The results lead to a series of theoretical and practical implications.

Discussion and implications

Findings. The results of the analysis show that the most important attributes for customers' favorable perception of the point-of-sale environment are above all social: first and foremost, interactions between consumers (0.44), then between consumers and employees (0.41).

In this sense, these results represent a step forward in the literature, in terms of taking into account the social aspects of the point-of-sale environment in place of physical attributes alone (cf. Bitner, 1992), overcoming a limitation recognized by researchers (Tombs and McColl-Kennedy, 2003; Bitner, 1992; Turley and Milliman, 2000). These results enrich the literature by confirming the multidimensional nature of the customer experience, in line with the work of Verhoef et al. (2009), Gentile et al. (2007) and others, who identify the sensory, affective, relational and symbolic components of this construct. Far from being determined solely by the tangible elements of the environment, the customer experience is also constructed from social interactions and shared affects. The results confirm the central role of the complete mediating interface of the customer experience between the bars environment and post-visit behaviors; in particular, revisit intention and the propensity to stay and consume more in bars. This result confirms the environmental stimuli-customer experience-visit behavior relational chain suggested by researchers (Gahler et al., 2022; Grewal, 2009). The results also show that induced emotional contagion mediates the relationship between the social and physical stimuli of the bars environment and the customer experience. This confirms the findings of previous research on the role of emotional contagion on customers' affective states and behavior (Tombs and McColl-Kennedy, 2003). However, this research does not otherwise establish companion moderation on the relationship between environmental stimuli and customer experience. This does not support our initial hypotheses, nor does it reinforce the results of previous work (Chebat, et al., 2014; Hart and Dale, 2014; Borges et al., 2010). It should be noted that most works on experience show the companion, either as an independent variable (Gui et al., 2021; Wenzel and Benkenstein, 2018), or as a moderating variable following the example of Borges et al. (2010). The role of the companion may differ according to the psychological dynamics that define the activity. In our study, the originality

lies in the fact that the experience in a collective (social) consumption place such as bars is more constrained than the simple, more functional consumption experience such as shopping in a store. Companionship in the bars context is a logical consequence of the desire for sociability (interactions), and the presence of other customers and employees would already play this role. In short, this work demonstrates that customer and customer-employee interactions contribute to a more rewarding, pleasurable and enriching customer experience. This work adds to the literature by providing empirical evidence on customer experience, which is still in its infancy in the context of point-of-sale visits (Borges et al., 2010). The results have a number of theoretical and practical implications.

Theoretical Contributions. Firstly, the results confirm the appropriateness of the S-O-R (Stimulus-Organism-Response) model proposed by Mehrabian and Russell (1974) in the context of bars. By showing that physical and social stimuli have a direct influence on the customer experience, which in turn has a positive effect on revisit intention, our research extends the field of application of this model towards a slightly more relational and emotional approach to consumption. Secondly, one of the major contributions of this research lies in demonstrating the mediating role of emotional contagion. As such, this research is not part of a strictly individual approach to consumption, but returns to a more collective, social approach. Our contribution argues for a more social, interactional approach to consumption, echoing Tauber's (1972) early insights into the social function of shopping. Similarly, this research provides interesting insights into the dynamics around experience as co-creation between customers and staff (Pralhad and Ramaswamy (2004). Emotional contagion acts as a mediator, shedding light on the way in which the emotions felt by others (customers or employees) act on personal feelings. It follows on from Hatfield et al. (1994) work on emotional transmission and Pugh's (2001) work on service, but adds a broader experiential dimension and highlights the need to consider the social and emotional in the design and management of the customer experience at the point of sale. Ultimately, the proposed conceptual model aims to build an integrated customer experience management system (in the sense of Berry et al., 2006) that links physical and social dimensions, as well as emotional dynamics and relational interactions. Approaches focused on the environmental design of the point of sale (Turley and Milliman, 2000; Baker et al., 1994) need to be broadened to include human interaction, in order to better design strategic differentiation levers in relation to the customer experience (Pine and Gilmore, 1999; Schmitt, 1999).

Practical contributions. Managers must invest in integrating customer experience requirements into the design of the outlet's physical environment. To do so, they must take into account the harmony between sensory attributes (light, sound, smell) and functional fluidity (layout, accessibility) in their sales areas. These elements contribute to the comfort and positive stimulation of customers. Companies need to encourage high-quality social interaction by engaging in relational and emotional training for their staff, reinforcing their listening, empathy and self-management skills. Employees need to be made aware of their behavioral impact (postures, gestures, body language, tones...) and the customer experience. In addition, we need to encourage facilities that encourage interaction between customers, to promote conviviality and enrich the customer experience. Take interaction into account in the development of the offer, by designing spaces or offers specifically dedicated to groups. One difficulty is that not all visitors seek a moment of pure sociability in their leisure experience (Debenedetti, 2003). Spatial arrangements must therefore take this into account. In some cases, this will mean creating a spatial layout that facilitates greater social interaction, while in others, the layout will need to be organized in such a way as to enable customers to protect their privacy or at least reduce the perception of saturated environments (Tombs and McColl-Kennedy, 2003). Initiatives to promote conviviality can take the form, for example, of a few welcoming rituals or a more interactive musical ambience. Bars outlets need to reinvent their customer journeys as emotional, immersive narratives, rather than transactional ones, featuring scenography design, entertainment and personalized exchanges.

Study Limitations and Directions for Future Research

Although the contribution of this research is noteworthy, a number of limitations must be pointed out with a view to guiding future research. Firstly, the empirical framework of the study is confined to bars, a type of outlet whose specific characteristics - relaxed atmosphere, strong social dimension, search for immediate pleasure - do not allow us to generalize the results to other commercial environments. Indeed, in other contexts (e.g., gourmet restaurants, stores), other logics of interaction and consumption may well prevail, both functionally and symbolically (Bitner, 1992; Pine and Gilmore, 1999). In addition, another weak point is the memory recall of respondents, who were asked to recall a bar they had visited with most recency, biases not being excluded. This limitation suggests a diversification of methodologies, including qualitative methods (interviews, in situ observations) or mixed approaches (Creswell and Plano Clark, 2017) combining objective and subjective data.

Furthermore, this research takes a static approach to the customer experience, whereas the literature stresses the importance of its evolutionary construction over time through repeated interactions with stimuli (De Keyser et al., 2020; Lemon and Verhoef, 2016). Taking a longitudinal approach would enable more interesting analyses of the relational and affective dynamics at work in the customer journey. Another avenue of research could explore cultural effects. Indeed, social interactions on the one hand, and expectations concerning the service environment on the other, can vary greatly from one cultural context to another, and thus have a significant influence on the perception of the social and physical environment of the point of sale (Mattila, 1999). It might also be interesting to extend the study to cross-cultural contexts in order to test the effectiveness of the proposed model.

Our approach takes a holistic view of the customer experience. Since each customer evaluates the dimensions of customer experience separately and distinguishes their importance, not all dimensions of customer experience need to mediate every customer interaction. It would therefore be interesting to study which customer experience dimensions mediate the relationship (Solomon et al. 1985; Yim et al. 2008). It would be interesting to evaluate all the key dimensions of customer experience to distinguish the dimensions relevant to each customer interaction (Becker and Jaakkola 2020; De Keyser et al. 2020).

In addition, the role of the companion as an important moderating variable deserves to be better investigated in more functional contexts. Future investigations could vary the type of social bond (friends, companions, colleagues), the dynamics between the group or the degree of perceived intimacy, drawing on work on shared experiences and collective emotional capital (Arnould and Price, 1993; Pugh, 2001). On the other hand, the emotional contagion well taken into account in our model could be further investigated through an intersubjective approach to emotions, for example, by considering how the emotional manifestations of both employees and other customers, influence in real time the individual's affective state and de facto, his evaluation of the overall experience. These suggestions point the way to comparative, experimental or longitudinal studies that could add to our knowledge of consumption dynamics in collective and hedonic contexts.

References

- Allen, C. T., & Donnelly, J. H. (1985). The relationship between advertising and product quality over the product life cycle: A contingency theory perspective. *Journal of Advertising Research*, 25(3), 19–33.
- Alnabulsi, H., & Drury, J. (2014). Social identification moderates the effect of crowd density on safety at the Hajj. *Proceedings of the National Academy of Sciences*, 111(25), 9091–9096.
- Arnould, E. J., & Price, L. L. (1993). River magic: Extraordinary experience and the extended service encounter. *Journal of Consumer Research*, 20(1), 24–45.
- Baker, J. (1987). The role of the environment in marketing services: The consumer perspective. In J. A. Czepiel, C. A. Congram, & J. Shanahan (Eds.), *The Services Challenge: Integrating for Competitive Advantage* (pp. 79–84). American Marketing Association.
- Baker, J., Grewal, D., & Parasuraman, A. (1994). The influence of store environment on quality inferences and store image. *Journal of the Academy of Marketing Science*, 22(4), 328–339.
- Baron, S., Harris, K., & Davies, B. (1996). Oral participation in retail service delivery: A comparison of the roles of customers and employees. *Journal of Retailing and Consumer Services*, 3(2), 65–76.
- Becker, L., & Jaakkola, E. (2020). Customer experience: Fundamental premises and implications for research. *Journal of the Academy of Marketing Science*, 48(4), 630–648.
- Bennett, R. (1977). The marketing mix. *Management Decision*, 15(3), 47–51.
- Berry, L. L., Wall, E. A., & Carbone, L. P. (2006). Service clues and customer assessment of the service experience: Lessons from marketing. *Academy of Management Perspectives*, 20(2), 43–57.
- Bihl, L. (2023). *Une histoire populaire des bistrots* (801 p.). Nouveau Monde éditions.

- Bikanda, P. J. (2022). Les rapports de genre dans les bars en milieux urbains africains : Analyses socioanthropologiques de la sociabilité de séduction (416 p.). Editions Cheikh Anta Diop.
- Bitner, M. J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. *Journal of Marketing*, 56(2), 57–71.
- Bolton, R. N., Gustafsson, A., McCollKennedy, J. R., Sirianni, N. J., & Tse, D. K. (2014). Small details that make big differences: A radical approach to consumption experience as a firm's differentiating strategy. *Journal of Service Management*, 25(2), 253–274.
- Borges, A., Chebat, J. C., & Babin, B. J. (2010). Does a companion always enhance the instore experience? *Journal of Retailing and Consumer Services*, 17(4), 294–299.
- Bourdieu, P. (1994). *Raisons pratiques: Sur la théorie de l'action* (Paris; 245 p.). Seuil.
- Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand experience: What is it? How is it measured? Does it affect loyalty? *Journal of Marketing*, 73(3), 52–68.
- Buchanan, B., Christensen, L. T., & Burdge, J. J. (1981). Social groups and the meanings of outdoor recreation activities. *Journal of Leisure Research*, 13(3), 254–266.
- Bustamante, J., & Rubio, N. (2017). Measuring customer experience in physical retail environments. *Journal of Service Management*, 28(5), 884–913.
- Carú, A., & Cova, B. (2003). Revisiting consumption experience: A more humble but complete view of the concept. *Marketing Theory*, 3(2), 267–286.
- Chebat, J. C., Michon, R., & HajSalem, N. (2014). The effects of mall environment on shopping value and satisfaction. *Journal of Retailing and Consumer Services*, 21(5), 685–692.
- Churchill, G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16(1), 64–73.
- Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research* (3rd ed.). Sage.
- Das, G., & Varshneya, G. (2017). Consumer emotions: Determinants and outcomes in a shopping mall. *Journal of Retailing and Consumer Services*, 38, 177–185.
- Davies, B., Baron, S., & Harris, K. (1999). Looking at the servicescape: A conceptual model. *Marketing Review*, 1(2), 99–118.
- Dawson, S., Bloch, P. H., & Ridgway, N. M. (1990). Shopping motives, emotional states, and retail outcomes. *Journal of Retailing*, 66(4), 408.
- De Keyser, A., Lemon, K. N., Klaus, P., & Keiningham, T. L. (2020). A framework for understanding and managing the customer experience (Report No. 20108). Marketing Science Institute.
- De Keyser, A., Verleye, K., Lemon, K. N., Keiningham, T. L., & Klaus, P. (2020). Moving the customer experience field forward: Introducing the touchpoints, context, qualities (TCQ) nomenclature. *Journal of Service Research*, 23(4), 433–455.
- Debenedetti, A. (2003). L'expérience de visite des lieux de loisirs : Le rôle central des compagnons. *Recherche et Applications en Marketing*, 18(4), 43–58.

- Didry, C., & Giannelloni, J. L. (2019). Les dynamiques émotionnelles collectives: Perspectives pour le marketing. *Recherche et Applications en Marketing*, 34(4), 1–28.
- Donovan, R. J., & Rossiter, J. R. (1982). Store atmosphere: An environmental psychology approach. *Journal of Retailing*, 58(1), 34–57.
- Douglas, M. (1987). *Constructive drinking: Perspectives on drink from anthropology*. Cambridge University Press.
- Fiske, S. T. (1992). Thinking is for doing: Portraits of social cognition from daguerreotype to laserphoto. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 25, pp. 1–59). Academic Press.
- Fokina, M. (2023). Online shopping statistics: Ecommerce trends for 2023. Tidio. Retrieved January 3, 2024, from <https://www.tidio.com/blog/online-shopping-statistics/>.
- Gahler, M., Klein, J. F., & Paul, M. (2023). Customer experience: Conceptualization, measurement, and application in omnichannel environments. *Journal of Service Research*, 26(2), 191–211.
- Gentile, C., Spiller, N., & Noci, G. (2007). How to sustain the customer experience: An overview of experience components that cocreate value with the customer. *European Management Journal*, 25(5), 395–410.
- Gerbing, D. W., & Anderson, J. C. (1988). An updated paradigm for scale development incorporating unidimensionality and its assessment. *Journal of Marketing Research*, 25(2), 186–192.
- Grewal, D., Levy, M., & Kumar, V. (2009). Customer experience management in retailing: An organizing framework. *Journal of Retailing*, 85(1), 1–14.
- Grove, S. J., & Fisk, R. P. (1992). Observational data collection methods for services marketing: An overview. *Journal of the Academy of Marketing Science*, 20(3), 217–224.
- Gui, H., Li, J., & Sun, L. (2021). How does customer experience affect customer loyalty in the retail industry? Evidence from China. *Journal of Retailing and Consumer Services*, 60, Article 102444.
- Hagen, S., & Bryant, R. (2003). The role of empathy in customer–employee interactions. *Service Industries Journal*, 23(3), 99–110.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage.
- Harris, L. C., Baron, S., & Davies, B. J. (1995). Conversations during purchase consideration: Sales assistants and consumers. *International Review of Retail, Distribution and Consumer Research*, 5(2), 225–244.
- Hart, C., & Dale, B. (2014). With or without you: The positive and negative influence of retail companions. *Journal of Retailing and Consumer Services*, 21, 780–787.
- Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1994). *Emotional contagion*. Cambridge University Press.
- Heath, C. (2000). The private self and public expression: An analysis of consumer emotion in public spaces. *Journal of Consumer Behaviour*, 1(1), 25–35.
- Helmefalk, M., & Berndt, A. (2017). Shedding light on the use of single and multisensory cues in a retail context. *International Journal of Retail & Distribution Management*, 45(11), 1147–1159.
- Heywood, J. (1987). Marketing of experience in the national parks. *Journal of Travel Research*, 25(4), 3–9.
- Hochschild, A. R. (1983). *The managed heart: Commercialization of human feeling*. University of California Press.

- Holbrook, M. B., & Hirschman, E. C. (1982). The experiential aspects of consumption: Consumer fantasies, feelings, and fun. *Journal of Consumer Research*, 9(2), 132–140.
- Homburg, C., Jozić, D., & Kuehn, C. (2017). Customer experience management: Toward implementing an evolving marketing concept. *Journal of the Academy of Marketing Science*, 45, 377–401.
- Huber, G. P., & McCann, J. E. (1982). The impact of affirmative action on the employment of minorities and women over three decades. *Academy of Management Journal*, 25(3), 699–713.
- Hui, M. K., & Bateson, J. E. G. (1991). Perceived control and the effects of crowding and consumer choice on the service experience. *Journal of Consumer Research*, 18(2), 174–184.
- Hui, M. K., Dubé, L., & Chebat, J. C. (1997). The impact of music on consumers' reactions to waiting for services. *Journal of Retailing*, 73(1), 87–104.
- Jain, R., Aagja, J. P., & Bagdare, S. (2017). Customer experience—a review and research agenda. *Journal of Service Theory and Practice*, 27(3), 642–662.
- Kerin, R. A., Hartley, S. W., Berkowitz, E. N., & Rudelius, W. (2002). *Marketing* (7th ed.). McGrawHill.
- Kim, H., & Moon, H. (2009). Effects of emotions and customers' perceptions on customer satisfaction: The case of theme parks. *Tourism Management*, 30(3), 116–125.
- Klaus, P., & Maklan, S. (2013). Towards a better measure of customer experience. *International Journal of Market Research*, 55(2), 227–246.
- Kotler, P., Keller, K. L., Manceau, D., & Hémonnet-Goujot, A. (2017). *Marketing management* (16^e éd.). Pearson.
- Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing*, 80(6), 69–96.
- Mattila, A. S. (1999). The role of emotions in service encounters. *Journal of Services Marketing*, 13(4), 268–282.
- McCollKennedy, J. R., Cheung, L., & Ferrier, E. (2019). Cocreating service experience practices. *Journal of Service Theory and Practice*, 29(6), 703–724.
- McCollKennedy, J. R., & Sparks, B. (2003). Application of SERVQUAL to retailing: A critique. *International Journal of Retail & Distribution Management*, 31(2), 95–103.
- Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. *Journal of Personality*, 40(4), 525–543.
- Niedzielski, P.-E. (2018). *Sociabilités de comptoir : Une ethnographie des débits de boissons* (Thèse de doctorat). Université de Strasbourg.
- Nisbett, R. E., & Ross, L. (1980). *Human inference: Strategies and shortcomings of social judgment*. PrenticeHall.
- Novelli, D., Drury, J., Reicher, S., & Stott, C. (2013). Crowdedness mediates the effect of shared social identity on positive experience and empowerment in a crowd: A survey of two crowd events. *PLoS One*, 8(10), e78983.
- Obadia, C. (2004). Le « boire ». Une anthropologie en quête d'objet, un objet en quête d'anthropologie. *Socio-anthropologie*.
- Osborne, D. J. (1987). *Ergonomics at work* (2nd ed.). Wiley.
- Ossebi, H. (1980). Un quotidien en trompe-l'œil : Bars et « nganda » à Brazzaville. In *Politique africaine* (n° 31), 67–72.

- Petitta, L., & Naughton, T. J. (2015). Emotional contagion in work groups: The role of leader and coworker emotion. *Leadership & Organization Development Journal*, 36(2), 150–166.
- Picard, R. W. (2007). *Affective computing*. MIT Press.
- Pine, B. J., & Gilmore, J. H. (1998). Welcome to the experience economy. *Harvard Business Review*, 76(4), 97–104.
- Prahalad, C. K., & Ramaswamy, V. (2004). Cocreating unique value with customers. *Strategy & Leadership*, 32(3), 4–9.
- Pugh, S. D. (2001). Service with a smile: Emotional contagion in the service encounter. *Academy of Management Journal*, 44(5), 1018–1027.
- PwC. (2023). *Experience is everything: Here's how to get it right (Consumer Intelligence Series)*.
- Reynolds, K. (2003). Emotional responses to service environments: The influence of the emotions of others. *Journal of Business Research*, 56(10), 1051–1061.
- Rossiter, J. R. (2002). *Measurement for the social sciences: The COARSE method and why it must replace psychometrics*. Springer.
- Schmitt, B. H. (1999). *Experiential marketing*. Free Press.
- Schouten, J. W., McAlexander, J. H., & Koenig, H. F. (2007). Transcendent customer experience and brand community. *Journal of the Academy of Marketing Science*, 35(3), 357–368.
- Solomon, M. R., Surprenant, C., Czepiel, J. A., & Gutman, E. (1985). A role theory perspective on dyadic interactions: The service encounter. *Journal of Marketing*, 49(1), 99–111.
- Spradley, J. P., & Mann, B. J. (1979). *The cocktail waitress: Woman's work in a man's world*. Wiley.
- Sutton, R. I., & Rafaeli, A. (1988). Untangling the relationship between displayed emotions and organizational sales: The case of convenience stores. *Academy of Management Journal*, 31(3), 461–487.
- Sutton, R. I. (1991). Organizational performance and the emotion management of college professors. *Organizational Behavior and Human Decision Processes*, 50(1), 1–23.
- Tombs, A., & McCollKennedy, J. R. (2003). Socialservicescape conceptual model. *Marketing Theory*, 3(4), 447–475.
- Tschan, F., Rochat, S., & Zapf, D. (2005). It's not only clients: Studying emotion work with clients and coworkers with an eventsampling approach. *Journal of Occupational and Organizational Psychology*, 78(2), 195–220.
- Turley, L. W., & Milliman, R. E. (2000). Atmospheric effects on shopping behavior: A review of the experimental evidence. *Journal of Business Research*, 49(2), 193–211.
- Vargo, S. L., & Lusch, R. F. (2008). Servicedominant logic: Continuing the evolution. *Journal of the Academy of Marketing Science*, 36, 1–10.
- Verhoef, P. C. (2009). Customer experience creation: Determinants, dynamics and management strategies. *Journal of Retailing*, 85(1), 31–41.
- Voorhees, C. M., Fombelle, P. W., Gregoire, Y., Bone, S. A., Gustafsson, A., Sousa, R., & Walkowiak, T. (2017). Service encounters, experiences and the customer journey: Defining the field and a call to expand our lens. *Journal of Business Research*, 79, 269–280.

- Wakefield, K. L., & Baker, J. (1998). Excitement at the mall: Determinants and effects on shopping response. *Journal of Retailing*, 74(4), 515–539.
- Wenzel, A., & Benkenstein, M. (2018). Together always better? The influence of shopping companions on customers' emotional shopping experience. *Journal of Retailing and Consumer Services*, 40, 1–9.
- Wong, A., Tjosvold, D., & Liu, C. (2012). Cooperative and competitive conflict for quality service in East Asia. *Psychology & Marketing*, 29(4), 289–300.
- Yim, C. K., Chan, K. W., & Lam, S. S. (2008). Do customers and employees enjoy service participation? Synergistic effects of self- and other efficacy. *Journal of Marketing*, 72(6), 132–146.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60(2), 31–46.

Summary Brief

Signalling Morality Online: How Conspicuous Virtue Drives Green Consumption among Young Ghanaians

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This study examines how moral identity influences green purchase intentions through conspicuous virtue signaling (CVS) in an online context among 206 Ghanaian young professionals and students. Using structural equation modeling, results show that internalization predicts self-oriented CVS, symbolization predicts other-oriented CVS, and both forms significantly mediate the morality–green purchase link. Direct effects of moral identity on purchase intentions were weak, underscoring the mediating role of CVS. Findings extend Identity-Based Motivation Theory to online green consumption in Africa and offer marketing insights for leveraging digital platforms to amplify sustainable consumer behaviour.

Introduction and Background

Across Africa, environmental awareness and sustainable consumption are gaining momentum, with a growing number of consumers considering eco-friendly products in their purchase decisions (Tsay, 2009). While this trend is evident in several African countries, including Sierra Leone (Sesay & Guo, 2022), Ghana is witnessing a particularly notable rise in green awareness and consumption. Increasing access to sustainable products, exposure to global environmental discourse, and the influence of social media have combined to create fertile ground for the adoption of green consumption practices. Among the youth; especially young professionals and students; interest in sustainable lifestyles is becoming more pronounced. This segment is not only environmentally aware but also digitally active, making them an influential force in shaping Ghana's green market.

Despite these developments, scholarly attention to green consumption in sub-Saharan Africa remains sparse, with much of the existing research emerging from Western contexts (Li et al., 2022; Sesay & Guo, 2022). This geographic bias limits the generalizability of existing theories, particularly when cultural factors may alter how environmental values translate into consumer behavior. In Ghana, morality holds a central place in daily life; shaped by communal values, respect for social norms, and a collective sense of responsibility. This moral grounding offers a unique opportunity to leverage moral identity as a driver of pro-environmental behavior, particularly among youth.

Moral identity; defined as the extent to which moral traits are central to one's self-concept has two dimensions: internalization (private, intrinsic moral commitment) and symbolization (public expression of moral values) (Aquino & Reed, 2002). Evidence from Sierra Leone confirms that both dimensions positively influence green purchase intentions, but often through mechanisms that connect identity to visible, socially relevant actions (Sesay & Guo, 2022). In Ghana's digitally connected society, these mechanisms can potentially be expressed through virtue signaling, where consumers publicly display eco-friendly behaviors as a means of self-expression or social recognition, especially on social media.

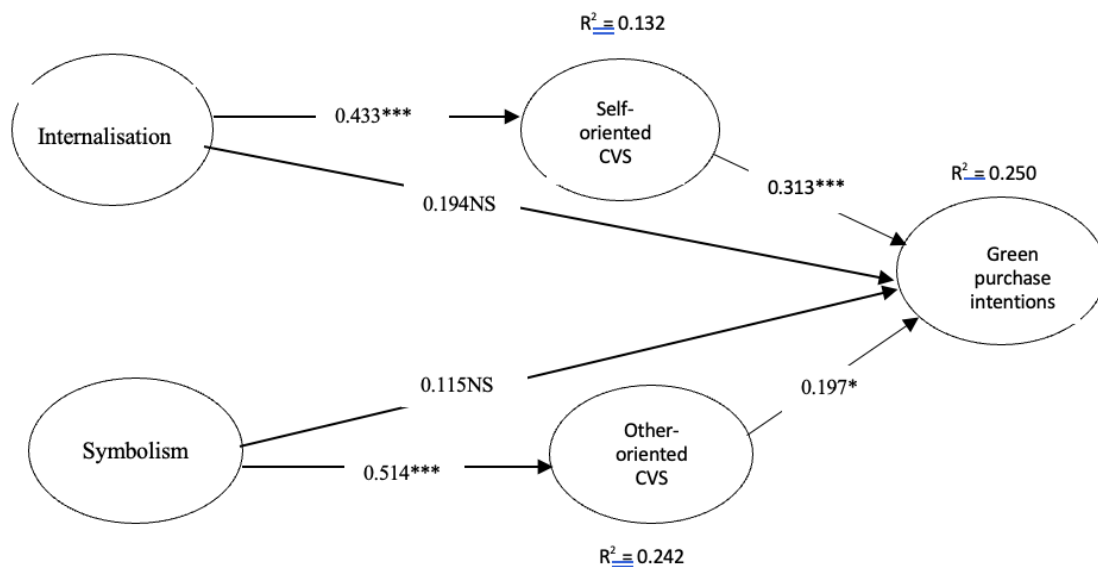
Virtue signaling in green consumption can take two forms: self-oriented conspicuous virtue signaling, aimed at affirming one's own moral self-concept, and other-oriented conspicuous virtue signaling, aimed at gaining social approval or enhancing one's public image (Li et al., 2022; Johnson et al., 2018). Online platforms have amplified these behaviors, making green consumption both a personal statement and a public performance. For Ghanaian youth a first evolving online-savvy, socially expressive demographic, digital environments provide fertile ground for understanding how moral identity translates into sustainable consumption.

However, prior research often relies on traditional behavioral models such as the Theory of Planned Behavior (TPB), which emphasize attitudes, norms, and perceived control but overlook identity-based pathways and

the role of conspicuous moral expression (Megha, 2024). Moreover, the mediating role of virtue signaling in the relationship between moral identity and green purchase intention remains underexplored, particularly in African contexts.

To address these gaps, this study draws on Identity-Based Motivation (IBM) Theory (Oyserman, 2009) to examine how moral identity (internalization and symbolization) shapes self- and other-oriented conspicuous virtue signaling, and how these in turn drive green purchase intentions among Ghanaian youth. By integrating insights from prior African studies with the unique cultural and digital dynamics of Ghana, this research advances theoretical understanding of identity-driven green consumption and offers practical guidance for sustainable marketing in emerging markets.

Method and Results



Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The study drew on survey data from 206 Ghanaian young professionals and university students, an online-savvy and environmentally aware demographic. Using structural equation modeling (SEM), the analysis tested a mediation model linking moral identity–internalization and symbolization to green purchase intentions through self-oriented and other-oriented conspicuous virtue signaling (CVS).

The results showed that moral identity–internalization significantly predicted self-oriented CVS ($\beta = 0.433$, $p < .001$), while moral identity–symbolization significantly predicted other-oriented CVS ($\beta = 0.514$, $p < .001$). Both self-oriented CVS ($\beta = 0.313$, $p < .001$) and other-oriented CVS ($\beta = 0.197$, $p = .030$) were significant predictors of green purchase intentions. In contrast, direct effects from moral identity to purchase intentions were weak. Internalization ($\beta = 0.194$, $p = .095$) was not significant, and symbolization ($\beta = 0.115$, $p = .305$) was also not significant. This finding indicates that the influence of moral identity on green purchase intentions operates primarily through virtue signaling.

Implications for Theory

These results extend Identity-Based Motivation Theory (Oyserman, 2009) into the African context, demonstrating that moral identity drives pro-environmental intentions most effectively when expressed through socially visible behaviors. The findings also clarify the distinct roles of moral identity's two dimensions:

internalization promotes self-oriented virtue signaling that affirms personal moral consistency, whereas symbolization promotes other-oriented signaling aimed at social recognition. By showing that these signaling pathways mediate the morality-behavior relationship, the study helps explain why prior research has sometimes found weak or inconsistent direct effects of moral identity on sustainable consumption.

Implications for Marketing Practice

For marketing practitioners, the findings suggest that green campaigns targeting morally conscious consumers should offer more than moral appeals; they should create opportunities for public expression of values. For those driven by internalization, messages should emphasize personal integrity and alignment with deeply held beliefs. For those high in symbolization, campaigns should highlight the prestige and recognition associated with eco-friendly behaviors. Because the youth segment in Ghana is digitally engaged, marketers can amplify green purchase motivations by enabling consumers to showcase their sustainable choices online through shareable content, branded hashtags, and community recognition features.

References

- Aquino, K., & Reed II, A. (2002). The self-importance of moral identity. *Journal of personality and social psychology*, 83(6), 1423.
- Johnson, C. M., Tariq, A., & Baker, T. L. (2018). From Gucci to green bags: Conspicuous consumption as a signal for pro-social behavior. *Journal of Marketing Theory and Practice*, 26(4), 339-356.
- Megha. (2024). Determinants of green consumption: a systematic literature review using the TCCM approach. *Frontiers in Sustainability*, 5, 1428764.
- Oyserman, D. (2009). Identity-based motivation: Implications for action-readiness, procedural-readiness, and consumer behavior. *Journal of Consumer Psychology*, 19(3), 250–260. <https://doi.org/10.1016/j.jcps.2009.05.008>
- Li, D., Cheng, G., & Wang, C. (2022). The influence of moral identity on green consumption. *Frontiers in psychology*, 13, 1020333.
- Sesay, M. S., & Guo, X. (2022). How does consumer moral identity influence green consumption through self-enhancement/self-verification? An empirical investigation in Sierra Leone. *International Journal of Science and Business*, 16(1), 211-231.
- Tsay, Y. Y. (2009, August). The impacts of economic crisis on green consumption in Taiwan. In *PICMET'09 2009 Portland International Conference on Management of Engineering & Technology* (pp. 2367-2374). IEEE.
- Wu, B., and Yang, Z. (2018). The impact of moral identity on consumers' green consumption tendency: the role of perceived responsibility for environmental damage. *J. Environ. Psychol.* 59, 74–84. doi: 10.1016/j.jenvp.2018.08.011

SESSION 23.2: STRATEGY, REPUTATION, AND VALUES IN MODERN MARKETS

Moderators:

Aniruddha Pangarkar

Full Paper

Distinguishing Between Effective and Ineffective Plateauees: An Application of Commitment Systems Theory

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A random sample of employees was surveyed to explore the differences between effective and ineffective plateauees. The results indicated that effective plateauees perceived stronger productivity propensity and person-job fit compared to ineffective plateauees. The study also showed that career plateauing can be due to organizational and personal reasons. Based on the results, several managerial implications were suggested to prevent the onset of career plateauing and prevent plateauees from becoming ineffective.

Introduction

Layoffs in corporate America and the pressure to save costs has gradually led to fewer opportunities for promotion. For example, Google recently announced several hundred layoffs in its human resources and cloud services teams while Microsoft announced it is reducing 3% of its total workforce. Similar downsizing has been announced by Meta, Amazon, and CrowdStrike (Elias, 2025; Novet, 2025). In fact, significant layoffs have been announced by companies this year with notable large-scale cuts from Intel (15,062 roles), Tesla (14,500 roles), and Cisco (10,150 roles) (Kelly, 2025). Consequently, many corporate employees may have reached a career plateau, which is the “point in a career where the likelihood of additional hierarchical promotion is very low” (Ference, Stoner, and Warren, 1977, p. 602). Plateaued employees may lose their motivation to perform well since there is no opportunity for growth. This lack of motivation and its effect on task performance will affect organizational success. Thus, there is significant interest in researching methods of motivating plateaued employees.

Ference, Stoner, and Warren (1977, p. 602) argued that “there is nothing inherently negative about the notion of a career plateau.” According to these authors, a plateaued employee may or may not continue performing at a high level. The authors categorized high performing plateauees as “solid citizens” and low performing plateauees as “deadwoods.” Although much research has been done on how to prevent career plateauing, relatively less attention has been given to understanding why some plateauees continue to be effective (solid citizens), while others fail to do so. One factor that may explain such a divergence is the cause of the plateau. Plateauism is precipitated in two distinct forms: personal and organizational. Personal plateauism occurs when employees decide not to pursue further advancement, characterized by individuals with minimal job-related KSA (i.e., knowledge, skills, and abilities) and negative personal characteristics (i.e. poor attitudes, few aspirations, and lack of motivation). Organizational plateauism occurs when an individual’s desire to advance within an organization but is unable due to a lack of hierarchical openings. Is it possible that these structural differences in plateauing result in effective and ineffective plateauees? Moreover, can an organization predict which employees will become effective versus ineffective plateauees?

Given these potential effects, the aim of the current study is to shed light on the performance implications of career plateauing. Specifically, this study will classify a national random sample of employees into effective and ineffective plateauees and explore their differences. The results will shed light on plateauing effects, enable organizations to identify potential plateauees, and provide guidance on how to prevent the hiring of employees that may become ineffective plateauees.

Theoretical Background and Hypotheses

Organizational scholars have viewed commitment as an explanation of why some employees desire to remain employed while others do not. In general, commitment is “a volitional psychological bond reflecting dedication to and responsibility for a particular target” (Klein, Molloy, and Brinsfield 2012, p. 137). Allen and Meyer (1990) proposed that commitment consists of an “affective base (I want to stay), a normative base (I feel I ought to stay), and a continuance base (I need to stay)” (Solinger, Hofmans, and Olffen 2015, p. 774). In addition to the employing organization, employees are likely to have multiple commitment targets. For example, an employee will be committed to their family, their colleagues, their coworkers, their supervisor, their friends from other organizations, as well as to their hobbies and interests. Klein, Solinger, and Duflot (2022, p. 117) argued that employees coordinate their multiple commitments by “the process of prioritizing, structuring, reconfiguring, and alternating multiple, simultaneously held commitments.” That is, employees manage their multiple commitments as a system characterized by the number of different commitments, the strength of each commitment, and the coupling and decoupling of different commitments (Klein, Solinger, and Duflot, 2022). Consequently, commitment systems are dynamic and the interactions among the elements of commitment systems may change over time. Based on this dynamic microstructure of organizational commitment, Solinger, Hofmans, and Olffen (2015) found empirical support for the affective base of attitude to change at a slower rate than that of the cognitive and behavioral bases. Further, the cognitive and behavioral bases of attitude reciprocally influence each other. Thus, as employees perceive the onset of career plateauing (cognitive base), their emotional attachment to the organization (affective base) continues, while their work performance (behavioral base) gradually declines.

Person-organization fit (PO fit) captures the degree to which an employee’s values and the employing organization’s values are aligned. Based on the needs-supplies perspective, “PO fit occurs when an organization satisfies individuals’ needs, desires, or preferences” (Kristoff 1996, p. 3). When employees perceive a misalignment between their and their organizations’ norms and values, their perceived person-organization fit (PO fit) may weaken. Consequently, effectively plateaued employees’ PO fit is expected to be significantly lower than their ineffectively plateaued colleagues. Thus,

H1: The PO fit of effective plateauees will be significantly stronger than that of the ineffective plateauees.

Despite a weakened PO fit, effective plateauees may continue to perform at a high level due to their productivity propensity (PP). Productivity Propensity (PP) is a “disposition to successfully accomplish job-related tasks in a timely manner (Harris et al. 2014, p. 174). PP is a psychological disposition that motivates employees to excel in work behaviors and a personal resource to resolve the competing demands of customer orientation and organizational productivity. Harris (2020) found empirical support for a negative relationship between PP and role conflict/role ambiguity and a positive relationship between PP and self-rated performance. Since effective plateauees continue to perform at a high level, they are expected to possess a stronger PP compared to ineffective plateauees. Therefore,

H2: The PP of effective plateauees will be significantly stronger than that of the ineffective plateauees.

Another source of career plateauing could be an inadequate Person-Job fit (PJ fit). The domain of PJ fit includes demand-abilities fit in which employees’ KSA’s are adequate for what the job requires, and needs-supplies fit in which employees’ needs, desires, and preferences are satisfied by the job tasks (Edwards, 1991). In their meta-analysis, Kristoff-Brown, Zimmerman, and Johnson (2005) found a strong positive correlation (0.47) between PJ fit and organizational commitment. More recent studies have also confirmed the positive effect (0.66) of PJ fit on job performance (Chou, Hsieh, and Hung, 2022). Thus, a lack of PJ fit may weaken employees’ organizational commitment and result in career plateauing. Consequently, PJ fit of effective plateauees is expected to be stronger than ineffective plateauees. Formally stated,

H3: The PJ fit of effective plateauees will be significantly stronger than that of the ineffective plateauees.

Task performance, or lack of it, has been used as the key metric to measure the productivity of employees (e.g., Gerdel et al. 2025). Since performance can differentiate between effective and ineffective plateauees (Ference, Stoner, and Warren, 1977), task performance can be used to categorize employees. Since task performance is

quantifiable, it is a good measure of productivity especially when employees' work behaviors cannot be observed. In the current study, task performance was used to identify effective and ineffective plateauees.

Methodology

A total of 189 participants (Mage = 43.6, Male = 48%) were recruited through CloudResearch and provided monetary compensation in exchange for their participation in the study. To qualify for participation in the study, respondents were required to be in current full-time employment with an organization. Results indicated that, on average, the participants held nearly 7 years and 8 months of employment history with their respective companies. In addition, respondent employment represented a wide range of business sizes: 100 or less employees (27%), 100 – 999 employees (33%), 1000 – 3499 employees (17%) and 3500 or more employees (23%).

Participants were instructed to respond to a series of questions related to their career. First, participants responded to a 6-item measure of career plateauing ($\alpha = 0.92$) based on Milliman's (1992) scale. The scale included items such as, "My opportunities for upward movement are limited in my present organization." A 5-item scale was adapted from past studies (e.g., Cable and DeRue, 2002), and used to assess their PO fit ($\alpha = 0.96$) which included items such as "My personal values match my organization's values and culture." Next, PP was measured using the 4-item PROPEN scale developed by Harris et al. (2014). A sample item was "I worked hard to increase my productivity on the job." Respondents' PJ fit was measured with a 6-item scale developed by Cable and DeRue (2002). A sample item was "The job that I currently hold gives me everything that I want from a job." Finally, respondents' task performance was measured using the 5-item Individual Work Performance scale developed by Koopmans et al. (2014). A sample item was "I was able to carry out my tasks efficiently." All items were rated on a 5-point Likert scale ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree").

Analysis and Results

To develop categories based on career plateauing scores, a median split (3.67) was used. Respondents with higher than 3.67 career plateauing scores were plateaued. There were 52 plateaued employees. Next, a median split (4.80) of task performance scores of these 52 employees was used to group effective and ineffective plateauees. Respondents scoring higher than 4.80 in task performance were effective plateauees. An independent samples t-test was performed to assess the differences in mean scores of PO fit, PP, and PJ fit between these two groups of plateauees.

H1 was not supported since the mean PO fit score for effective plateauees (3.52) was not significantly greater than that of the ineffective plateauees (3.24) (sig. $t > 0.10$). H2 was supported since the mean PP score for effective plateauees (4.27) was significantly greater than that of the ineffective plateauees (3.39) (sig. $t < 0.01$). H3 was also supported since the mean PJ fit score for effective plateauees (3.85) was significantly greater than that of the ineffective plateauees (3.37) (sig. $t < 0.05$). Taken together, these results have significant managerial implications regarding career plateauing.

Discussion

The results of this study indicate that both organizational and personal career plateauing appear prevalent among employees. Organizational plateauing was manifested by the difference in person-job fit and personal plateauing was manifested by the difference in productivity propensity between effective and ineffective plateauees. Effective plateauees had stronger productivity propensity and perceived a better person-job fit than ineffective plateauees. Consequently, career plateauing can be remedied by organizations by recruiting employees with high productivity propensity, and by designing tasks that matches the employees' knowledge, skills, and abilities. Several managerial implications result from these findings.

Managerial Implications

First, recruiting employees with the best qualifications for the job may not always be prudent. The lack of KSA of new recruits can be mitigated by appropriate training and mentoring. However, PP is an enduring trait that may not always be modifiable. Thus, PP should be included as a selection criterion while recruiting employees.

Second, organizations should match employees with jobs for which they have adequate KSA. This is especially important when employees are transferred within the organization to fill up vacancies. Although organizations are cutting costs by layoffs, they still need the execution of the tasks done by laid off employees for

effective functioning. Consequently, there might be a need to reshuffle job responsibilities temporarily. The potential decline in PJ fit might induce career plateauing and compromise task performance.

Organizations can also engage early, mid, and late-career employees to remedy the onset of career plateauing. North (2025) proposed PORTAL (progression, off-loading, relevance, teachings, advice, and legacy) to satisfy the distinct needs of employees during various career stages. According to North (2025), progression refers to the career advancement of early-career employees and off-loading refers to mid-career employees' desire to off-load routine tasks to early-career employees. Progression-off-loading can be used to develop a symbiotic relationship between early-career and mid-career employees which can satisfy their respective needs.

In PORTAL (North 2025), relevance-teachings refer to a symbiotic relationship between early-career and late-career employees where each satisfies the distinct needs of the other. Late-career employees may avoid being irrelevant by teaching early-career employees the KSA's needed for career advancement. North (2025) proposed advice-legacy as a symbiotic relationship between late-career employees who advice mid-career employees on how to avoid burnout, and this mentoring satisfies late-career employees' need for long-term legacy. Thus, the PORTAL framework improves work engagement in all levels of career stages thereby preventing the onset of career plateauing. Career management policies may need to be modified to encourage symbiotic relationships among early-, mid-, and late career employees to minimize the effects of career plateauing.

Limitations and Directions for Future Research

Although the initial sample size was adequate ($n = 189$), the median split of plateaued employees and the median split of task performance among the plateaued employees resulted in a sample size 52. Of them, 23 were effective plateauees and 29 were ineffective plateauees. Although the random sample makes the results generalizable, the results should be interpreted with caution due to the low sample size.

Future research can further the results by several ways. First, a replication is needed to ascertain why effective and ineffective plateauees did not differ in PO fit. Early career employees are expected to perceive a lower level of PO fit compared to mid- and late career employees since they will need time to assess their PO fit. Thus, there might be differences in PO fit among career stages if organizational tenure is included as a control variable.

A replication of this study can be performed based on job-content plateauing, which is different from career plateauing. Allen et al. (1999, p. 1115) defined job-content plateauing as the point at which the "work has been mastered and the job has become boring." It will be interesting to see if productivity propensity can be a buffer to job-content plateauing. It is possible that the higher productivity propensity of effective plateauees will prevent the onset of job-content plateauing despite the potential decline in person-job fit.

Finally, with regard to the outcomes of career plateauing, recent studies have introduced a new measure of performance – contextual performance. Although past studies on plateauing have primarily focused on task performance, employees are also required to perform job behaviors that are beyond job-specific tasks. For example, employees need to communicate with other employees, coordinate their actions, follow instructions, and occasionally "perform in ways that go beyond their job descriptions" (Van Scotter and Motowidlo 1996, p. 525). Borman and Motowidlo (1993) distinguished between task and contextual performance and argued that contextual performance involves employee interactions with coworkers, supervisors, and customers, and demonstrating self-discipline, persistence, and exerting efforts. Contextual performance predicted overall performance over and above that of task performance (Van Scotter, Motowidlo, and Cross 2000) and explained unique variance in judgments of promotability (Jawahar and Ferris 2011). Thus, future research should explore whether effective and ineffective plateauees differ in contextual performance.

References

- Allen, N. J., & Meyer, J. P. (1990), "The Measurement and Antecedents of Affective, Continuance, and Normative Commitment to the Organization," *Journal of Occupational Psychology*, 63(1), 252-276.
- Allen, T. D., Russell, J. E. A., Poteet, M. L., & Dobbins, G. H. (1999), "Learning and Development Factors Related to Perceptions of Job Content and Hierarchical Plateauing," *Journal of Organizational Behavior*, 20, 1113-1137.

- Borman, W.C., & Motowidlo, S.J. (1993). "Expanding the Criterion Domain to Include Elements of Contextual Performance". In: Schmitt, N. and Borman, W.C., Eds., *Personnel Selection in Organizations*. Jossey-Bass, San Francisco, 71-98.
- Cable, D. M., & DeRue, D. S. (2002), "The Convergent and Discriminant Validity of Subjective Fit Perceptions," *Journal of Applied Psychology*, 57(5), 875-884.
- Chou, N., Hsieh, H., & Hung, T. (2022), "The Impact of Person-Job Fit on Job Performance: Job Involvement as a Mediator, and Career Plateau as Mediated Moderator," *The International Journal of Organizational Innovation*, 14(3), 115-133.
- Edwards, J. R. (1991), "Person-Job Fit: A Conceptual Integration, Literature Review, and Methodological Critique," In Cooper CLRLT (ed), *International Review of Industrial and Organizational Psychology*, 6, 283-357, Chichester, UK: Wiley.
- Elias, J. (2025, February 27). Google Announces Layoffs in its HR, Cloud Units as Part of Ongoing Cost Cuts. CNBC. <https://www.cnbc.com/2025/02/27/google-makes-cuts-to-hr-and-cloud-units.html>
- Ference, T. P., Stoner, J. A., & Warren, E. K. (1977). "Managing the Career Plateau," *Academy of Management Review*, 2(4), 602-612.
- Gerdel,, S., Dalla Rosa, A., Duffy, R. D., & Vianello, M. (2025), "The Causal Relation Between Career Calling and Task Performance: A Three-Wave Panel Study," *Applied Psychology*, 74(1), 1-13.
- Harris, E. G., Brown, T. J., Mowen, J. C., & Artis, A. (2014), "Exploring the Role of Productivity Propensity in Frontline Employee Performance: Its Relationship with Customer Orientation and Important Outcomes," *Psychology & Marketing*, 31(3), 171-183.
- Jawahar, I.M., & Ferris, G.R. (2011). "A Longitudinal Investigation of Task and Contextual Performance Influences on Promotability Judgments," *Human Performance*, 24(3), 251-269.
- Kelly, J. (2025, May 10). Big Layoffs Are Hitting These Sectors the Hardest. Forbes. <https://www.forbes.com/sites/jackkelly/2025/05/10/big-layoffs-are-hitting-these-sectors-the-hardest/>
- Klein, H. J., Molloy, J. C., & Brinsfield, C. T. (2012), "Reconceptualizing Workplace Commitment To Redress a Stretched Construct: Revisiting Assumptions and Removing Confounds," *Academy of Management Review*, 37(1), 130-151.
- Klein, H. J., Solinger, O. N., & Dufлот, V. (2022), "Commitment System Theory: The Evolving Structure of Commitments to Multiple Targets," *Academy of Management Review*, 47(1), 116-138.
- Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., de Vet, H. C. W., & van der Beek, A. J. (2014), "Measuring Individual Work Performance: Identifying and Selecting Indicators," *WORK: A Journal of Prevention, Assessment, and Rehabilitation*, 48(2), 229-238.
- Kristoff-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005), "Consequences of Individuals' Fit at Work: A Meta-Analysis of Person Job, Person Organization, Person Group, and Person Supervisor Fit," *Personnel Psychology*, 58(), 281-342.
- Kristoff, A. L. (1996), "Person-Organization Fit: An Integrative Review of Its Conceptualizations, Measurement, and Implications," *Personnel Psychology*, 49(1), 1-49.
- Milliman, J. F. (1992), *Causes, Consequences, and Moderating Factors of Career Plateauing*. Unpublished Doctoral Dissertation. University of Southern California.

North, M. S. (2025), "A Symbiotic Portal to Engaging Early-, Mid-, and Late-Career workers: Progression, Off-Loading, Relevance, Teachings, Advice, Legacy," *Academy of Management Review*, 50(2), 392-414.

Novet, M. (2025, May 13), Microsoft Laying Off about 6,000 People, or 3% of its Workforce. CNBC.
<https://www.cnbc.com/2025/05/13/microsoft-is-cutting-3percent-of-workers-across-the-software-company.html>

Solinger, O. N., Hofmans, J., & van Olffen, W. (2015), "The Dynamic Microstructure of Organizational Commitment," *Journal of Occupational and Organizational Psychology*, 88(4), 773-796.

Van Scotter, J. R., & Motowidlo, S. J. (1996), "Interpersonal Facilitation and Job Dedication as Separate Facets of Contextual Performance," *Journal of Applied Psychology*, 81(5), 525-531.

Van Scotter, J. R., Motowidlo, S. J., & Cross, T. C. (2000), "Effects of Task Performance and Contextual Performance on Systemic Rewards," *Journal of Applied Psychology*, 85(4), 526-535.

Summary Brief

More Than a Promise: The Critical Role of Corporate Reputation in Upholding the Diversity, Equity, & Inclusion Social Contract.

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This paper investigates how support of social contract as it relates to Diversity, Equity, and Inclusion (DEI) initiatives shape brand equity through the lens of the brand–consumer social contract. Drawing on Integrative Social Contract Theory, we examine how fulfillment or violation of DEI-related commitments affects consumers and also test the role of corporate reputation. We find that the influence of social contract support on brand equity is fully transmitted through corporate reputation. Our results highlight corporate reputation’s mediating role and offer practical implications for reputation management and strategic decision-making in the current environment.

Introduction

The concept of a social contract between brands and stakeholders has gained renewed relevance. The understanding of a brand as a bundle of promises has always been popular in marketing (Anker et al. 2012; Barney, 2014; Bhargave and Bedi 2021; Pearson, 2006; Ryder, 2007). McMurrian & Washburn (2008) emphasized that customers describe their relationship with the brand as a pact or a contract and that these contracts led to brand loyalty and “... implicit understanding that the brand will behave in certain ways...” (Keller, 2003). Consumers increasingly expect brands to act as moral entities and uphold their perceived social contracts. When brands fail to meet these expectations, they risk violating consumer trust leading to damaged relationships, damaged reputation, and damaged brand equity. Such violations of social contracts may result in consumers displaying negative reactions such as anger, contempt, boycotting, brand activism, etc. (Russell et al 2015). Recent examples of high profile cases such as Nike’s partnership with Colin Kaepernick in 2018 leading to protests and initial stock declines (Trotta 2018), Bud light’s partnership with transgender influencer Dylan Mulvaney in 2023 leading to up to 25% decline in their US sales (Rajesh 2023), X (formerly Twitter)’s sudden policy changes around 2024 leading to its advertisers and users abandoning the app (Reuters 2023), Meta, Amazon, Target and many other companies rolling back their DEI initiatives leading to consumer backlash (Cavale 2025; Paul & Babu 2025), illustrate how deviations from consumer expectations can erode trust and undermine brand equity.

Background

The research examines the relationship between social contract and brand equity, a topic increasingly relevant for both scholars and practitioners. Donaldson and Dunfee (1994) proposed that social contracts exist between two communities – for e.g. brands and its customers - each of which holds expectations about the other’s behavior. Dunfee, Smith, & Ross (1999) also introduced Integrative Social Contract Theory (ISCT) which

conceptualized the social contract as a relationship grounded in expectations of broad moral principles and localized community norms.

Corporate social responsibility (CSR) is a well studied mechanism through which brands operationalize their social contracts (Donaldson & Dunfee 1994; Sacconi 2006). CSR increasingly integrates social aspects such as Diversity, Equity, and Inclusion (DEI) (Laskin and Kresic 2018). DEI initiatives are related closely to the social contract between brands and its consumers (Aguinis and Glavas 2012; Bhattachary & Sen 2004; Goolsby and Hunt 1994; Sacconi 2004). DEI initiatives - taken up or not engaged in - by the brands reflect an implicit moral promise made to its consumers. A withdrawal from its implied social contract can be interpreted as a breach of moral responsibility, leading to outcomes that are detrimental to the company's brand equity.

Our paper investigates how DEI initiatives, as an integral element of CSR, influence brand equity, and whether Corporate Reputation affects this relationship. While prior research has examined the relationship between CSR, Corporate Reputation, and Brand equity, few studies have focused specifically on DEI as a part of a brand's social contract with its customers. We propose that brand social contract support or violations will impact the brand's equity and that corporate reputation plays a mediating role in this effect.

Key Findings

A mediation analysis using Hayes' PROCESS macro (Model 4) was conducted to determine if corporate reputation mediates the relationship between social contract support and brand equity. The results indicate a significant total effect of social contract support on brand equity (Effect = 1.35, $p < .001$). This relationship was found to be fully mediated by corporate reputation. Specifically, social contract support had a significant positive effect on corporate reputation (coeff. = 1.53, $p < .001$), which in turn had a significant positive effect on brand equity (coeff. = 0.92, $p < .001$). After accounting for the mediator, the direct effect of social contract support on brand equity was not significant (Effect = -0.05, $p = .476$). The bootstrapped indirect effect was significant (Effect = 1.40, 95% BootCI [1.20, 1.61]), confirming that the influence of social contract support on brand equity is fully transmitted through its impact on corporate reputation.

References

- Anker, T. B., Kappel, K., Eadie, D., & Sandøe, P. (2012). Fuzzy promises: Explicative definitions of brand promise delivery. *Marketing Theory*, 12(3), 279–296.
- Aguinis, H., & Glavas, A. (2012). What We Know and Don't Know About Corporate Social Responsibility. *Journal of Management*, 38(4), 932–968.
- Barney, J. B. (2014). How marketing scholars might help address issues in resource-based theory. *Journal of the Academy of Marketing Science*, 42(1), 24–26
- Bhargava, V. R., & Bedi, S. (2022). Brand as Promise. *Journal of Business Ethics*, 179(3), 761–778.
- Bhattacharya, C. B., & Sen, S. (2004). Doing better at doing good: When, why, and how consumers respond to corporate social initiatives. *California Management Review*, 47(1), 9–24.
- Cavale, S. (2025, January 24). Target ending DEI initiatives amid Trump's order on diversity programs. Reuters. <https://www.reuters.com/business/retail-consumer/target-ends-its-3-year-diversity-equity-inclusion-initiatives-2025-01-24/>
- Donaldson, T. and T. Dunfee (1994). Towards a Unified Conception of Business Ethics: Integrative Social Contracts Theory, *Academy of Management Review*, 19(2), pp. 252–84.
- Dunfee, T.W., N. C. Smith and W. T. Ross Jr (1999). Social Contracts and Marketing Ethics. *Journal of Marketing*, 63 (July), pp. 14–33.
- Goolsby, J. R. and S. D. Hunt (1992). Cognitive Moral Development and Marketing. *Journal of Marketing*, 56 (January), pp. 55–68.

- Keller, K. L. (2003). Understanding brands, branding, and brand equity. *Interactive Marketing*, 5(1), 7–20.
- Laskin, A.V. and Kresic, K. (2021). Inclusion as a Component of CSR and a Brand Connection Strategy. *Public Relations for Social Responsibility (Communicating Responsible Diversity, Equity, and Inclusion)*, Emerald Publishing Limited, Leeds, pp. 149-163.
- Paul, K., Babu, J., (2025, January 10). Meta, Amazon scale back diversity programs ahead to Trump inauguration. Reuters. <https://www.reuters.com/sustainability/society-equity/meta-end-diversity-programs-ahead-trump-inauguration-2025-01-10/>
- Pearson, B. (2006). Life is not a shopping cart: Building brands'. *Journal of Consumer Marketing*, 23(7), 385–386
- Rajesh, A. M. (2023, June 14). Bud Light loses top US beer spot after Mulvaney ad boycott. Reuters. <https://www.reuters.com/business/retail-consumer/bud-light-loses-top-us-beer-spot-after-mulvaney-ad-boycott-2023-06-14/>
- Reuters (2023, January 18). Over 500 advertisers have paused spending on Twitter- The Information. Reuters. https://www.reuters.com/technology/twitters-revenue-down-40-year-over-year-platformer-reporter-2023-01-18/?utm_source=chatgpt.com
- Russell, C.A., Russell, D.W., Honea, H. (2015). “Corporate Social Responsibility Failures: How do Consumers Respond to Corporate Violations of Implied Social Contracts? *Journal of Business Ethics*. 36:759–773
- Ryder, I. (2007). Customer Experience, *Journal of Brand Management*, 15(2): 85–8.
- Sacconi, L. (2006). A social contract account for CSR as an extended model of corporate governance (I): Rational bargaining and justification. *Journal of business ethics*, 68(3), 259-281.
- Trotta, D. (2018, September 4). Kaepernick ads spark boycott calls, but Nike is seen as winning in the end. Reuters. <https://www.reuters.com/article/sports/kaepernick-ads-spark-boycott-calls-but-nike-is-seen-as-winning-in-the-end-idUSKCN1LK1DK/>
- McMurrian, R. C., & Washburn, J. H. (2008). Branding: A social contract between a business and its customers. In J. K. Peck & M. A. Mulvey (Eds.), *Proceedings of the Southern Marketing Association Conference* (pp. 153–156). Southern Marketing Association.

SESSION 23.3: TRUST, BIAS, AND THE CREATOR ECONOMY

Moderators:

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Summary Brief

An Empirical Analysis of Privacy Satisfaction among Fortune 100 Companies

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The increasing digitization of the marketplace has brought data privacy to the forefront of consumer-firm interactions. While prior research has explored various privacy constructs related to concerns, expectations, and knowledge, little is known about privacy satisfaction. Drawing on expectation confirmation theory and contextual integrity theory, this study examines how two managerial levers—transparency and control—affect privacy satisfaction, and how privacy satisfaction consequently impacts overall satisfaction and word-of-mouth (WOM) intentions. Using multigroup structural equation modeling across tech and non-tech companies with repeated measures ($N = 5,010$ brand evaluations), we find that transparency and control are positively associated with privacy satisfaction. Privacy satisfaction positively predicts overall satisfaction and WOM, with overall satisfaction partially mediating the latter. Notably, the effect of privacy satisfaction on overall satisfaction is significantly stronger for non-tech firms, consistent with consumers' contextual expectations of privacy in tech sectors.

INTRODUCTION

As society becomes increasingly integrated with digital technology, firms are accessing consumers' information, time, and space at unprecedented levels (Swani & Milne, 2022; Walker et al., 2019). Emerging technologies, such as wearable, IoT, and facial recognition technologies, have made privacy a defining issue for both consumers and marketers (Zhang & Watson, 2020). While research has examined privacy concerns (Okazaki et al., 2020), privacy expectations (Martin & Nissenbaum, 2016), and privacy knowledge (Slepchuk et al., 2022), less is known about how satisfied consumers are with firms' handling of their privacy. This concept—privacy satisfaction—is distinct from traditional privacy constructs and represents a critical consumer evaluation in the digital age.

Privacy satisfaction refers to the extent to which customers feel content with an organization's privacy practices (Swani & Milne, 2022). Previous research has found met privacy expectations to be a driver of privacy satisfaction in both B2C and B2B contexts (Swani & Milne, 2022; Swani et al., 2023). Additionally, research has found that physical privacy invasions can reduce consumers' overall satisfaction with shopping experiences (Esmark Jones et al., 2020). Yet, it is not well understood what actions firms can take to increase consumers' privacy satisfaction, its relationship with overall satisfaction, nor its impact on other key outcomes.

This research addresses these gaps by identifying transparency and control as two managerial levers that can enhance privacy satisfaction and by assessing privacy satisfaction's influence on overall satisfaction and word-of-mouth (WOM) intentions. Drawing on expectancy disconfirmation theory (EDT) (Oliver, 1980) and contextual integrity theory (Nissenbaum, 2004; 2011), we develop and test hypotheses about the antecedents and consequences of privacy satisfaction and how these relationships may vary across tech and non-tech companies. Importantly, we find that privacy satisfaction plays a more central role in shaping brand perceptions for non-tech firms than for tech firms, where consumers expect data tradeoffs as part of the value exchange. By examining the antecedents and consequences of privacy satisfaction across sectors, this research advances understanding of consumer privacy and provides actionable guidance for firms navigating the privacy landscape.

CONCEPTUAL BACKGROUND

Technology in the Marketplace

The pervasive integration of digital technologies into everyday life has transformed the boundaries of consumer privacy (Walker et al., 2019). For example, mobile marketing collects consumers' sensitive location data, shows ads in spaces they consider private, and sends notifications that interrupt their private time (Swani & Milne, 2022). Such corporate practices raise critical questions about how companies can maintain consumer satisfaction in the digital age.

Two possible managerial levers that may enhance privacy satisfaction are transparency and control. Transparency occurs when consumers are aware of how organizations handle and share their data with other organizations, whereas control refers to the extent to which consumers believe they can manage the flow of information (Swani et al., 2021). Transparency and control have been found to suppress the negative effects of customer data vulnerability (Martin et al., 2017) and increase trust (Swani et al., 2021). As such, these two managerial levers offer a promising pathway for firms seeking to enhance privacy satisfaction in an era where traditional boundaries of consumer-company interaction have eroded.

Consumer Satisfaction and Privacy Satisfaction

Customer satisfaction (CSAT) has long been a cornerstone of marketing research, shown to impact repurchase intentions and WOM (Szymanski & Henard, 2001). CSAT is a multidimensional construct that encompasses multiple subdomains (Yi, 1990), including product satisfaction (Richins & Bloch, 1991) and service satisfaction (Anderson et al., 2008). Yet, as firms increasingly engage consumers across digital touchpoints, there is a growing need to conceptualize satisfaction with respect to privacy.

Privacy satisfaction represents a consumer's assessment of a firm's ability to effectively manage consumers' self-other boundary (Altman, 1977). Privacy satisfaction is distinct from other privacy constructs in that it captures an evaluative outcome of the firm's behavior, as opposed to consumers' emotional reactions (e.g., privacy concern) or their cognitive appraisals (e.g., privacy knowledge). Swani and Milne (2022) demonstrate that meeting privacy expectations reduces emotional violation and enhances cognitive trust, thereby improving privacy satisfaction. Swani et al. (2023) also found evidence of met privacy expectations indirectly increasing privacy satisfaction through emotional violation and trust within the B2B domain. Similarly, Esmark Jones et al. (2020) show that violations of physical privacy reduce satisfaction with in-person shopping experiences, reinforcing the importance of privacy as a subdomain of satisfaction. While prior studies have largely positioned privacy satisfaction as a dependent variable, its potential as a predictor of key marketing outcomes (e.g., overall satisfaction, WOM) remains underexplored. Demonstrating these downstream effects represents an important step toward establishing privacy satisfaction's practical relevance and theoretical contribution.

THEORY AND HYPOTHESIS DEVELOPMENT

Expectancy Disconfirmation Theory (EDT) (Oliver, 1980) provides a foundational framework for understanding consumer satisfaction. According to EDT, satisfaction results when consumer expectations are met or exceeded. In the context of digital privacy, firms shape these expectations through the clarity and boundaries they establish in their data practices. Two mechanisms, transparency and control, are especially relevant (Martin et al., 2017). Transparency allows consumers to understand how their information is collected, shared, and used, while control gives them the agency to influence these processes (Swani et al., 2021). By helping to set realistic and manageable privacy expectations, these mechanisms reduce the likelihood of disconfirmation and thus promote privacy satisfaction. Formally, we hypothesize that:

H1: Transparency is positively associated with privacy satisfaction.

H2: Control is positively associated with privacy satisfaction.

Building on this, we propose that privacy satisfaction acts as a key predictor of overall satisfaction and WOM intentions. Specifically, when consumers feel that their privacy expectations have been adequately addressed, they are more likely to express satisfaction with the brand in general and to speak positively about it. However, the strength of these relationships may vary by industry context. Drawing on the theory of contextual integrity (Nissenbaum, 2004, 2011), we argue that consumer expectations about privacy depend on the norms of specific sectors. While companies in the technology sector (e.g., social media companies, online search companies) tend to

engender a high level of privacy concern (Swani et al., 2021), consumers often anticipate privacy tradeoffs with these companies and accept that data collection and usage are integral to the value proposition. In contrast, consumers may expect more restraint and discretion from non-tech firms. As a result, privacy satisfaction may be a stronger predictor of overall satisfaction for non-tech firms. Formally, we hypothesize that:

H3a: Privacy satisfaction is positively associated with overall satisfaction.

H3b: The positive association between privacy satisfaction and overall satisfaction is weaker for tech brands than for non-tech brands.

H4a: Privacy satisfaction is positively associated with WOM intentions.

H4b: Privacy satisfaction is positively associated with WOM intentions indirectly through overall satisfaction.

METHODOLOGY

Data

We collected survey data from 549 US respondents through Prolific and rewarded respondents \$2.38 in exchange for their participation. After removing individuals who did not complete the survey (45), who failed either of the attention checks (2), and who straight-lined (1), 501 (female = 50.5%, 50 years or older = 42.7%, college graduate or higher = 63.9%, white = 69.9%) responses remained for analysis.

Respondents answered questions related to 10 random Fortune 100 companies, which represent the largest U.S. companies by total revenue. Measures for transparency, control, privacy concern, and trust were adapted from Swani et al. (2021). Informational, spatial, and temporal privacy expectations scales were adapted from Swani and Milne (2022). Scales for privacy satisfaction, overall satisfaction, WOM, familiarity, and data breach experience were all created specifically for this study. Each construct was treated as unidimensional in nature and all scales were measured on seven-point scales. We chose to use single items for data collection purposes to provide managers with an easy way to measure privacy satisfaction. Additionally, the use of single-item measures is common in cross-industry research (e.g., Swani et al., 2021; Labrecque et al., 2021), has been often used to measure satisfaction (Yi, 1990), and has been found to be as predictive as multi-item constructs (Bergkist & Rossiter, 2007).

Companies that are listed in Fortune's "technology sector" (e.g., Alphabet, Apple, Cisco Systems, Dell Technologies, HP, Intel, International Business Machines, Meta Platforms, Microsoft, Oracle) were coded as tech and all others were coded as non-tech.

Structural Equation Modeling

We ran a multigroup moderated mediation model in MPLUS to test our hypotheses. Prior to analysis, we converted the data into a long dataset ($n = 5,010$ respondent-company observations) and specified respondents as the repeated measure using the CLUSTER command. To control for extraneous variables, we added data breach experience, age, education, income, familiarity, trust, informational privacy expectations, spatial privacy expectations, temporal privacy expectations, and privacy concern to our empirical model and regressed them on the dependent variables. Given that we used single-item measures and the grouping was within subjects, we did not conduct a CFA or check for measurement invariance.

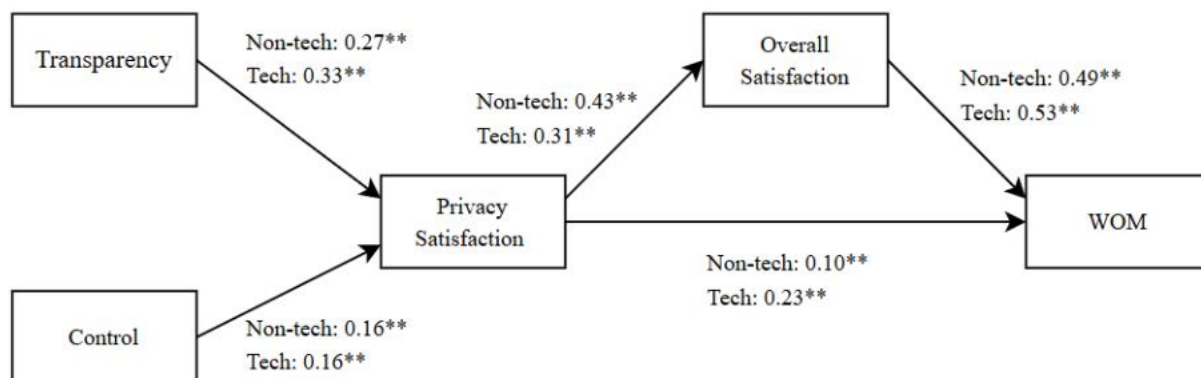
The results indicated that this model provided an acceptable fit to the data ($\chi^2(8) = 70.521$, RMSEA = 0.056, CFI = 0.991, TLI = 0.916, SRMR = 0.016). The R^2 values for the dependent variables in the tech model were as follows: privacy satisfaction ($R^2 = 0.626$), overall satisfaction ($R^2 = 0.694$), and WOM ($R^2 = 0.602$). The R^2 values for the dependent variables in the non-tech model were as follows: privacy satisfaction ($R^2 = 0.566$), overall satisfaction ($R^2 = 0.657$), and WOM ($R^2 = 0.572$).

First, we report significant non-hypothesized paths between the control and dependent variables. In both groups, temporal privacy expectations ($\beta_{\text{non-tech}} = 0.09$, $p_{\text{non-tech}} < 0.01$; $\beta_{\text{tech}} = 0.10$, $p_{\text{tech}} < 0.05$), familiarity ($\beta_{\text{non-tech}} = 0.08$, $p_{\text{non-tech}} < 0.01$; $\beta_{\text{tech}} = 0.08$, $p_{\text{tech}} < 0.01$), trust ($\beta_{\text{non-tech}} = 0.39$, $p_{\text{non-tech}} < 0.01$; $\beta_{\text{tech}} = 0.35$, $p_{\text{tech}} < 0.01$), and privacy concern ($\beta_{\text{non-tech}} = -0.06$, $p_{\text{non-tech}} < 0.01$; $\beta_{\text{tech}} = -0.08$, $p_{\text{tech}} < 0.05$) are

related to privacy satisfaction and familiarity ($\beta_{\text{non-tech}} = 0.17$, $p_{\text{non-tech}} < 0.01$; $\beta_{\text{tech}} = 0.11$, $p_{\text{tech}} < 0.01$) and trust ($\beta_{\text{non-tech}} = 0.27$, $p_{\text{non-tech}} < 0.01$; $\beta_{\text{tech}} = 0.45$, $p_{\text{tech}} < 0.01$) are related to overall satisfaction. Additionally, for tech companies, income ($\beta_{\text{tech}} = 0.07$, $p_{\text{tech}} < 0.05$) is related to overall satisfaction and education is related to WOM ($\beta_{\text{non-tech}} = -0.07$, $p_{\text{non-tech}} < 0.05$); for non-tech companies, spatial privacy expectations ($\beta_{\text{non-tech}} = 0.05$, $p_{\text{non-tech}} < 0.05$) is related to privacy satisfaction, temporal privacy expectations ($\beta_{\text{non-tech}} = 0.07$, $p_{\text{non-tech}} < 0.01$) and privacy concern ($\beta_{\text{non-tech}} = -0.04$, $p_{\text{non-tech}} < 0.05$) are related to overall satisfaction, and familiarity ($\beta_{\text{non-tech}} = 0.07$, $p_{\text{non-tech}} < 0.01$), trust ($\beta_{\text{non-tech}} = 0.22$, $p_{\text{non-tech}} < 0.01$), and privacy concern ($\beta_{\text{non-tech}} = 0.04$, $p_{\text{non-tech}} < 0.05$) are related to WOM.

The results of our hypothesis tests are displayed in Figure 1. We found support for our first two hypotheses, which asserted that privacy satisfaction would exhibit positive relationships with both transparency ($\beta_{\text{non-tech}} = 0.27$, $p_{\text{non-tech}} < 0.01$; $\beta_{\text{tech}} = 0.33$, $p_{\text{tech}} < 0.01$; supporting H1) and control ($\beta_{\text{non-tech}} = 0.16$, $p_{\text{non-tech}} < 0.01$; $\beta_{\text{tech}} = 0.16$, $p_{\text{tech}} < 0.01$; supporting H2). Hypothesis 3a stated that privacy satisfaction would have a positive relationship with overall satisfaction; our results again supported this hypothesis ($\beta_{\text{non-tech}} = 0.43$, $p_{\text{non-tech}} < 0.01$; $\beta_{\text{tech}} = 0.31$, $p_{\text{tech}} < 0.01$; supporting H3a). Moreover, a z-test comparing path coefficients between groups revealed that the effect of privacy satisfaction on overall satisfaction is stronger for non-tech companies than for tech companies ($z = 2.01$, $p < 0.05$), supporting hypothesis 3b. Hypothesis 4a stated that privacy satisfaction would have a positive relationship with WOM, which again was supported by our data ($\beta_{\text{non-tech}} = 0.10$, $p_{\text{non-tech}} < 0.01$; $\beta_{\text{tech}} = 0.23$, $p_{\text{tech}} < 0.01$; supporting H4a). Lastly, hypothesis 4b stated that this effect would be mediated by overall satisfaction. The indirect effect of privacy satisfaction on WOM was significant for both non-tech ($\beta_{\text{non-tech}} = 0.21$, $SE_{\text{non-tech}} = 0.02$, $p_{\text{non-tech}} < 0.01$) and tech companies ($\beta_{\text{tech}} = 0.16$, $SE_{\text{tech}} = 0.04$, $p_{\text{tech}} < 0.01$), supporting h4b. Given the significant direct effect of privacy satisfaction on WOM, this suggests that overall satisfaction partially mediates this effect.

Figure 1. SEM Results



Notes: The effects of the control variables on the dependent variables are not displayed here to reduce visual complexity. The indirect effect of privacy satisfaction on WOM is significant for both non-tech ($\beta = 0.21$, $p < 0.01$) and tech companies ($\beta = 0.16$, $p < 0.01$). The effect of privacy satisfaction on overall satisfaction is significantly stronger for non-tech brands than for tech brands ($z = 2.01$, $p < .05$).

DISCUSSION

This study underscores the relevance of privacy satisfaction as a distinct and influential construct in the digital marketplace. Our findings confirm that the managerial levers of transparency and control are positively associated with privacy satisfaction, suggesting that firms can enhance consumer evaluations of their privacy practices by clearly communicating data policies and offering meaningful choice and control. These findings provide a practical roadmap for organizations seeking to increase consumers' privacy satisfaction.

Importantly, privacy satisfaction emerged as a key driver of overall satisfaction and WOM intentions, with overall satisfaction partially mediating the latter. These results extend prior work by showing that privacy satisfaction plays an important role in shaping overall brand evaluations and consumer advocacy. The moderation analysis provides further nuance, revealing that the relationship between privacy satisfaction and overall satisfaction is significantly stronger for non-tech companies. This finding aligns with contextual integrity theory (Nissenbaum,

2004), which holds that consumer expectations around privacy are shaped by the norms of specific contexts. Consumers may view data collection as a necessary tradeoff when interacting with tech firms, thereby discounting the importance of privacy satisfaction in forming their overall evaluations. In contrast, they may hold non-tech firms to a higher standard, expecting them to uphold traditional boundaries around personal information, space, and time.

Collectively, these findings support a more expansive view of customer satisfaction—one that incorporates privacy satisfaction as a relevant subdomain—and provide actionable guidance to managers across sectors. For non-tech firms, maintaining consumer privacy may be especially critical to sustaining satisfaction and loyalty. For tech firms, while privacy satisfaction still matters, its impact may be muted by sector-specific norms and expectations.

LIMITATIONS AND FUTURE RESEARCH

A limitation of this research is its reliance on single-item measures. Future work should validate whether privacy satisfaction, as measured by a single item, captures the same underlying construct as multi-item scales rooted in privacy theory. Additionally, future research can conduct a case study on the tech and non-tech companies with the highest and lowest levels of privacy satisfaction to better understand best privacy management practices.

REFERENCES

- Altman, I. (1977). Privacy regulation: Culturally universal or culturally specific? *Journal of Social Issues*, 33(3), 66-84.
- Anderson, S., Pearo, L. K., & Widener, S. K. (2008). Drivers of service satisfaction: linking customer satisfaction to the service concept and customer characteristics. *Journal of Service Research*, 10(4), 365-381.
- Bergkvist, L., & Rossiter, J. R. (2007). The predictive validity of multiple-item versus single-item measures of the same constructs. *Journal of Marketing Research*, 44(2), 175-184.
- Esmark Jones, C. L., Stevens, J. L., Noble, S. M., & Breazeale, M. J. (2020). Panic attack: How illegitimate invasions of privacy cause consumer anxiety and dissatisfaction. *Journal of Public Policy & Marketing*, 39(3), 334-352.
- Labrecque, L. I., Markos, E., Swani, K., & Peña, P. (2021). When data security goes wrong: Examining the impact of stress, social contract violation, and data type on consumer coping responses following a data breach. *Journal of Business Research*, 135, 559-571.
- Martin, K., & Nissenbaum, H. (2016). Measuring privacy: An empirical test using context to expose confounding variables. *Colum. Sci. & Tech. L. Rev.*, 18, 176.
- Martin, K. D., Borah, A., & Palmatier, R. W. (2017). Data privacy: Effects on customer and firm performance. *Journal of Marketing*, 81(1), 36-58.
- Nissenbaum, H. (2004). Privacy as contextual integrity. *Wash. L. Rev.*, 79, 119.
- Nissenbaum, H. (2011). A contextual approach to privacy online. *Daedalus*, 140(4), 32-48.
- Okazaki, S., Eisend, M., Plangger, K., de Ruyter, K., & Grewal, D. (2020). Understanding the strategic consequences of customer privacy concerns: A meta-analytic review. *Journal of Retailing*, 96(4), 458-473.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460-469.
- Richins, M. L., & Bloch, P. H. (1991). Post-purchase product satisfaction: Incorporating the effects of involvement and time. *Journal of Business Research*, 23(2), 145-158.
- Slepchuk, A. N., Milne, G. R., & Swani, K. (2022). Overcoming privacy concerns in consumers' use of health information technologies: A justice framework. *Journal of Business Research*, 141, 782-793.

- Swani, K., & Milne, G. R. (2022). Impact of unmet privacy expectations across information, time, and space: evidence from four countries. *Journal of Interactive Marketing*, 57(2), 278-295.
- Swani, K., Milne, G. R., & Brown, B. P. (2023). The benefits of meeting buyer privacy expectations across information, time, and space dimensions. *Industrial Marketing Management*, 112, 14-26.
- Swani, K., Milne, G. R., & Slepchuk, A. N. (2021). Revisiting trust and privacy concern in consumers' perceptions of marketing information management practices: Replication and extension. *Journal of Interactive Marketing*, 56(1), 137-158.
- Szymanski, D. M., & Henard, D. H. (2001). Customer satisfaction: A meta-analysis of the empirical evidence. *Journal of the Academy of Marketing Science*, 29(1), 16-35.
- Walker, K. L., Milne, G. R., & Weinberg, B. D. (2019). Optimizing the future of innovative technologies and infinite data. *Journal of Public Policy & Marketing*, 38(4), 403-413.
- Zhang, J. Z., & Watson IV, G. F. (2020). Marketing ecosystem: An outside-in view for sustainable advantage. *Industrial Marketing Management*, 88, 287-304.

Summary Brief

Ad Choice and Intentions Toward Content Creators

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While digital advertising becomes increasingly personalized, consumers paradoxically report growing dissatisfaction with the ads they encounter online. This presents a challenge for content creators whose financial viability often depends on advertising revenue. Drawing on reactance theory and affect-as-information frameworks, this research explores whether allowing viewers to choose which ad to watch can improve perceptions of both the advertised product and the content creator. An experimental study demonstrates that ad choice enhances perceptions of hedonic value of the product, which in turn increases intentions to view more content from the associated creator. Mediation analyses confirm that hedonic value fully explains the relationship between ad choice and future content engagement intentions. These findings offer a low-cost, scalable strategy for improving advertising outcomes for both marketers and content creators.

Introduction

The rise of social media (Kemp, 2025) and the proliferation of niche content have reshaped how consumers consume media. Consumers are no longer confined to limited programming schedules, instead they navigate highly personalized content ecosystems curated to individual tastes (Dodda, 2022). Research indicates that many consumers perceive the ads they encounter as irrelevant or intrusive (Campbell et al., 2022), despite the increasing precision of targeted digital advertising, contributing to negative consumer sentiment toward advertising.

This dissatisfaction poses a serious challenge to independent content creators, who rely heavily on ad revenue through platforms such as YouTube. Much of the content being consumed is no longer created by large production studios but instead by small-scale creators who monetize through influencer partnerships and pre-roll advertisements (Johnson et al., 2022; Shah, Webster, & Kour, 2023; Filieri, Acikgoz, & Du, 2023). Importantly, advertisements not only shape consumer responses to the products they promote but also affect attitudes toward the surrounding content (Lee, 2003).

The present research investigates a practical intervention that may reduce negative reactions to digital ads: allowing consumers to choose the ad they watch. This approach aligns with the interactivity that now defines much of online content and may enhance viewer perceptions of both the advertisement and the content it precedes.

Ad Choice and Hedonic Value Perceptions

Reactance theory suggests that individuals experience an aversive motivational state when they feel their freedom of choice is being constrained (Brehm & Brehm, 1981; Amarnath & Jaidev, 2021). In digital advertising, forcing consumers to watch a specific ad can induce such reactance, leading to negative cognitive and emotional responses. Social Media Advertising Reactance (SMAR) has recently been defined as the “unpleasant psychological state experienced by users and caused by social media advertising” (Huo, Liu, & Min, 2021, p. 823), and is associated with reduced engagement and unfavorable brand evaluations.

To counteract these effects, advertisers are increasingly experimenting with interactive formats (Krishen et al., 2021). From mobile games that allow users to preview gameplay to financial institutions testing interactive calculators in ads (Mialki, 2025), interactivity has become a core strategy in modern advertising. One underutilized yet promising form of interactivity is ad choice, in which viewers select which advertisement they want to view from a small set of options (Bellman et al., 2020; Katz, 2010; Hu & Wise, 2024).

Prior research has demonstrated that offering ad choice enhances attention to the ad (Katz, 2010; Luo, Jiang, Li, Yi, & Tucker, 2024; Nettlehorst & Brannon, 2012), raises expectations (Nettlehorst, Jetter, & Brannon, 2014; Hu & Wise, 2024), and improves general perceptions of ad effectiveness (Katz, 2010). Ad choice has also been associated with a greater sense of consumer control, which is positively linked to ad favorability (Belanche, Flavián, & Pérez-Rueda, 2020). Although the relationship between ad choice and brand attitudes has shown mixed results (Bellman et al., 2020), there is consistent evidence that the perception of control can reduce resistance and improve ad engagement (Hu & Wise, 2024).

We build on this prior work by proposing that ad choice increases consumers' perceptions of hedonic value in the advertised product. Hedonic value reflects the emotional and experiential pleasure consumers derive from a product (Babin, Darden, & Griffin, 1994) and is a critical driver of brand loyalty (Kuikka & Laukkanen, 2012), satisfaction, and word-of-mouth (Jones, Reynolds, & Arnold, 2006). Hedonic value has also been shown to influence purchase intentions (Hirschman & Holbrook, 1982; Lee & Wu, 2017; Millan & Reynolds, 2014; Seo, Sung, & Yoon, 2024).

Based on this literature, we hypothesize that having a choice of ads will be associated with greater perceptions of hedonic value for the advertised product.

H1: Having a choice of ads will be positively associated with hedonic value perceptions of the advertised product.

Hedonic Value and Content Creator

Affect-as-information models suggest that individuals use affective responses as cues when evaluating unrelated stimuli (Schwarz & Clore, 2003). Positive emotions evoked by one experience can spill over to enhance perceptions of adjacent stimuli, such as nearby products or content (Hatfield & Cacioppo, 1994). This phenomenon, known as incidental affect transfer, has been documented across a variety of marketing contexts (Hasford et al., 2015; Han, Lerner, & Keltner, 2007).

In the current study, we explore how the hedonic value evoked by an advertisement can influence viewers' intentions to engage with the content that follows. When viewers find an advertisement enjoyable or emotionally appealing, those positive emotions may enhance their overall experience and increase the likelihood that they will continue consuming content from the same creator.

We therefore propose that hedonic value perceptions of the advertised product will be positively related to consumers' future engagement with the content creator's material.

H2: Hedonic value perceptions of the advertised brand's offerings will be positively associated with future content engagement intentions.

Hedonic Value Perceptions Mediation

While ad choice may directly influence content engagement, we suggest that the relationship is more accurately understood through the mediating role of hedonic value. In other words, the experience of being able to choose an ad increases perceptions of product enjoyment, which in turn increases intentions to engage with more content from the same creator.

If hedonic value mediates this relationship, it would suggest that the benefits of ad choice extend beyond the ad itself, positively affecting the broader viewing experience and enhancing platform or creator loyalty.

H3: Hedonic value perceptions will mediate the relationship between ad choice and future content engagement intentions.

Method and Results

These hypotheses were tested using an online experiment with 116 participants (50% female, average age = 40.38) recruited from a large subject pool. Participants were asked to imagine discovering a humorous animal video online, which they could watch only after viewing an advertisement.

Participants were randomly assigned to one of two conditions. In the choice condition, participants selected

between two titles for a fictional resort ad: “Romantic Getaway” or “Adventure Starts Here.” In the no-choice condition, participants were told they would be shown one of the ads. All participants were then shown the same video advertisement for the fictional resort Patrician Heights, followed by the animal video. This manipulation held ad content constant while varying perceived choice.

An ANOVA confirmed no significant difference in realism across conditions ($M = 5.57$, $p = .72$). A separate ANOVA showed that participants in the choice condition perceived the brand’s offerings as significantly more hedonic ($M = 5.36$) than those in the no-choice condition ($M = 4.74$), $F = 5.09$, $p < .05$. Using Hayes’ (2018) PROCESS Model 4, ad choice significantly predicted hedonic value ($B = .61$, $t = 2.25$, $p < .05$), and hedonic value significantly predicted future content engagement ($B = .47$, $t = 4.53$, $p < .05$). The indirect effect of ad choice on content engagement through hedonic value was significant ($ab = .29$, 95% CI: .04, .57), and the direct effect of ad choice on engagement was non-significant ($c' = -.56$, $t = -1.84$, $p = .07$), indicating full mediation.

Conclusion

This study provides initial support for the idea that providing ad choice enhances perceptions of product hedonic value, which in turn fosters greater engagement with the surrounding content. These findings extend previous work on ad interactivity and psychological reactance by highlighting hedonic value as a key mechanism through which ad choice influences consumer behavior.

For marketers and content creators, offering viewers the ability to choose their ads represents a simple yet powerful way to improve the advertising experience. By supporting consumer autonomy, ad choice can reduce consumer reactance, increase product appeal, and promote ongoing engagement with content.

This also opens several opportunities for additional research. While the existing research focuses on a single product, future research could explore the impact of different product types that are more or less consistent with the type of content that is being promoted by the content creator. Additional research could also look at the impact of having the content creator themselves as a more active participant in the ad choice process, whether through soliciting ideas for ads from their audience or being part of the advertisements being offered. Another area for future investigation is the format that choice should be presented in to be most appealing to consumers and when choice could be detrimental.

References available upon request

SESSION 23.4: WHERE THE CULTURE MEETS CUISINE

Moderators:

Wei Wang

Summary Brief

Eating Green on the Go: The Role of Consumer Consciousness and Involvement in Travelers' Organic Food Choices

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Introduction

In the United States, more than 80% of households occasionally purchase organic food products (Lu & Gursoy, 2017), reflecting a broader shift toward sustainability and health-conscious choices. While the role of organic dining has been examined in hospitality research, limited attention has been paid to organic food consumption in the context of travel (Liu et al., 2025). Addressing this gap, this study investigates how travelers' perceptions of organic food benefits and food quality influence their attitudes and trust, which in turn shape visit intentions, willingness to pay, and social media sharing behaviors. Furthermore, the study examines the moderating effects of consumer consciousness (health and price) and involvement (organic food and healthy eating) on these relationships.

Methodology and Potential Implications

Data will be collected through Prodege, an online survey platform, targeting participants aged 18 or older who have traveled at least once in the past 12 months. The stratified sampling technique will draw samples from a range of geographical and demographic subgroups, ensuring representation consistent with U.S. Census data. The goal of this sampling approach was to represent the main characteristics of the U.S. population by estimating the sizes of strata within the population (Campos-Soria et al., 2011).

Established scales will be used to measure perceptions, attitudes, trust, and behavioral intentions. Statistical analyses will be conducted using SPSS and PLS-SEM to test the proposed model and assess moderating effects. This approach provides a robust framework for testing the research hypotheses and validating key theoretical constructs.

By integrating behavioral, perceptual, and attitudinal factors, this research advances understanding of organic food consumption within tourism contexts. The results will not only enrich theoretical discussions on sustainable and health-driven dining behaviors but also provide actionable insights for hospitality managers and marketers to design targeted strategies that appeal to travelers seeking healthier and more sustainable food experiences.

References

- Campos-Soria, J. A., Marchante-Mera, A., & Ropero-García, M. A. (2011). Patterns of occupational segregation by gender in the hospitality industry. *International Journal of Hospitality Management*, 30(1), 91-102.
- Liu, P., Wen, H., & Mattila, A. S. (2025). Centering on health and wellbeing: Examining consumers' organic food purchasing decisions in restaurants when traveling. *International Journal of Hospitality Management*, 126, 104082.
- Lu, L., & Gursoy, D. (2017). Does offering an organic food menu help restaurants excel in competition? An examination of diners' decision-making. *International Journal of Hospitality Management*, 63, 72-81.

Summary Brief

Betting on Virtual Bites: How Ghost Kitchens Gain Loyalty through Credibility and Congruence

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This study examines determinants of customer intentions of online food delivery (OFD) from ghost kitchens. Based on responses from a sample of 506 respondents, the PLS-SEM results suggest that customers' perceived food quality and food value influence their revisit intention and loyalty through information credibility and technological congruence, with consumer innovativeness and restaurant familiarity as moderators. The IPMA results show that information credibility is the most important variable for revisiting intention and loyalty. The fsQCA results indicate that food quality and information credibility are necessary ingredients and sufficient configuration conditions. These findings integrate and extend theories in ghost kitchen contexts.

Introduction

Ghost kitchens, also known as virtual restaurants or cloud kitchens, are food operations that offer delivery-only meals without physical storefronts or dining areas (Cai et al., 2022). IBIS World (2025) reports that the market size of the ghost kitchens industry in the United States reached \$2.9bn in 2024, employing 42,248 individuals across 7,606 businesses. To remain competitive in the food service market, ghost kitchens are continually refining their services and offerings, with a focus on quality and innovation to attract customers seeking quick, tasty and convenient meals (IBIS World, 2025). Consumer research on ghost kitchens has emerged over the past five years. Existing studies have focused on the consumers' perceptions and attitudes towards food-related factors. In the restaurant industry, technology has played a crucial role in shaping consumer food ordering behavior (Kapoor & Vij, 2018; Timur et al., 2023; Wen et al., 2022). Therefore, this study examines the determinants of customers' intentions to order food from ghost kitchens. Grounded in source credibility theory and self-congruity theory, this study investigates how information credibility and perceived technological congruence mediate the relationship between food perceptions and behavioral intentions. Additionally, drawing on diffusion of innovation theory, this research explores consumer innovativeness and restaurant familiarity as moderating variables.

Key Findings

The results reveal that technology-related factors, such as information credibility and technology congruence, mediate the relationship between food attributes and customer behavioral intentions. Furthermore, consumer innovativeness and restaurant familiarity serve as moderators in this model. While previous research has explored the influence of food attributes on customer attitudes and intentions toward restaurants (Lin et al., 2024; Suhartanto et al., 2019), few studies have specifically examined how food perceptions interact with consumer attitudes toward technology in the ghost kitchen context. Other studies have focused on the role of technology in food delivery and how consumers respond to different platforms (Shankar et al., 2022; Shroff et al., 2022). This study extends that work by demonstrating that consumers' food perceptions influence their attitudes toward technology and underscore the importance of technology and consumer factors as mediators and moderators in shaping behavioral intentions. By integrating food, technology, and consumer components, this study provides empirical evidence for adopting a multifaceted approach to understanding consumer intentions in the ghost kitchen sector (Cai et al., 2022).

References

- Cai, R., Leung, X. Y., & Chi, C. G. Q. (2022). Ghost kitchens on the rise: Effects of knowledge and perceived benefit-risk on customers' behavioral intentions. *International Journal of Hospitality Management*, 101, 103110.
- Sirgy, M. J. (1982). Self-concept in consumer behavior: A critical review. *Journal of Consumer Research*, 9(3), 287-300.
- Wang, W. (2025). The wait for authenticity: The role of consumer innovativeness in shaping food truck perceptions. *International Journal of Hospitality Management*, 127, 104137.

Summary Brief

Art Centers in Smaller Communities: Importance of Awareness and Engagement

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Art centers in small communities serve an important role in fortifying the economy and providing residents an avenue to experience culture and strengthen social ties. Using the theory of reasoned action, this study aims to identify individual and social factors that can contribute to active engagement with local art organizations.

Introduction

Access to art in a community boosts the economy by creating jobs, encouraging tourism, and providing opportunities to the inhabitants. Art-based organizations enhance education, preserve local traditions, and help increase recognition of the arts among the public (Alabama State Council on the Arts (ASCA), 2025). The presence of art centers in small communities offers countless benefits to the residents. Art centers expose community members to new experiences, be it as fellow artists or engaged spectators (Balfour et al. 2016). Avenues offering art can foster a stronger sense of community by cultivating a sense of belonging (Moayerian et al. 2022). Art centers also foster cultural development of the residents (ASCA 2025; Moayerian et al. 2022). Access to the arts enhances the quality of life by helping build social connections, providing exposure to culture, providing an avenue to foster creativity, and enhancing overall mental and emotional well-being (ASCA 2025).

Most art organizations in small communities are non-profit organizations that rely on funding through membership subscriptions, grants, or charitable donations. For these organizations to survive, it is imperative to spark interest in and encourage engagement from residents of the communities they serve. The purpose of this study is to identify the role of psychological and social factors that can contribute towards the intent of community members to engage with the arts in their local community. Engagement with the local art organizations can be translated as visiting the centers, creating art for the purpose of exhibiting and selling at the center, and by financially supporting the local art institutions.

Conceptual development

The theory of reasoned action (TRA) has been used to explain “volitional behaviors” in that such behaviors can be predicted by behavioral intentions. Behavioral intentions, in turn, are the result of individual influence and normative influence. Individual influences are represented by the individual’s attitudes towards a behavior. Normative influences come from subjective norms as represented by the individual’s belief that significant others feel the individual should engage in certain behaviors (Fishbein & Ajzen 1975). Using the lens of the theory of reasoned action, we explore the role of individual as well as social factors in a person’s intent of engaging with a local art organization. Individual factors include attitude towards the arts, involvement with the arts, prosocial self-concept, and self-identification as an artist. Social factors can include perception of subjective norms such as the expectation of supporting the arts from others and awareness of the art center’s existence.

Individual and Social Influences on Art Engagement

Prosocial behavior. Previous research has shown a connection between engaging in arts, such as attending music performances, and prosocial behaviors such as volunteering (Polzella 2017). Van de Vyer et al. (2019) have found a connection between active participation in art and prosocial inter-group intentions. Kou et al. (2019) have found a positive correlation between the creation and consumption of art and prosocial traits and behaviors. While the focus of these studies has been the impact of engaging in art on prosocial behavior, Kou et al. (2019) also found the reverse relationship to be true, a positive correlation between prosocial behavior and art engagement. Similarly, Forgeard (2022) found that prosocial motivations are an important aspect of creativity in the arts. Therefore, we propose that individuals who possess prosocial traits and engage in prosocial behaviors would also be more inclined to actively support their local art organizations by contributing financially and in terms of time.

Involvement. The relationship between involvement and purchase intentions is well documented. It follows that the higher an individual's involvement with art, the more likely they would be to support a local art organization.

Awareness and subjective norms. It is not possible to actively engage with an entity without knowledge of its existence. Therefore, awareness about local art organizations would be an important factor in intent to engage with the organization. Theory of reasoned action supports that subjective norms such as an individual's belief that significant others expect them to engage in certain behaviors have an impact on the individual's behavioral intentions (Fishbein & Ajzen 1975). Strong social ties, such as those with family members and close friends, can have an impact on behavior (Ma et al. 2020). We propose that the mode of awareness can have an impact on the individual's intent to engage. For example, if information about an art center is shared by a close friend or family member, the intent to engage with it may be higher than finding out about it through traditional or social media.

Data collection

Data for the study will be collected from residents of a micropolitan city in the southeast United States with one or more active art organizations. Existing scales will be used to measure variables of interest such as prosocial attitude, involvement in the arts, awareness of local art organizations, mode of receiving information about them, and the intent to engage with local art organizations through attending events, becoming a member, and creating art.

Conclusion

Local art organizations strengthen small communities by driving economic activity and supporting the social, cultural, and emotional well-being of residents. Results from the study will help art organizations tailor their offerings as well as their marketing communications to better succeed in fostering engagement from current and prospective patrons. The study will build awareness in the arts as a factor in the success of their message and marketing. For organizations with limited resources to implement marketing strategies, this recognition will help focus resources on identified key areas (Pour et al., 2021).

References

- Alabama State Council on the Arts, March 25, 2025. https://arts.alabama.gov/news_detail.aspx?ID=16534
- Balfour, B., Fortunato, M. W-P., and Alter, T. R. (2016). The creative fire: An interactional framework for rural art-based development, *Journal of Rural Studies*.
- Fishbein, M., & Ajzen, I. (1975). Belief. *Attitude, intention, and behavior: An introduction to theory and research*, 50(2), 179-221.
- Forgeard, M. (2022, May 16). Prosocial Motivation and Creativity in the Arts and Sciences: Qualitative and Quantitative Evidence. *Psychology of Aesthetics, Creativity, and the Arts*. Advance online publication.
- Kou, X., Konrath, S., and Goldstein, T. R. (2019, July 25). The Relationship Among Different Types of Arts Engagement, Empathy, and Prosocial an. *Psychology of Aesthetics, Creativity, and the Arts*. Advance online publication.
- Ma, L., Zhang, X., Ding, X., and Wang, G. (2021). How Social Ties Influence Customers' Involvement and Online Purchase Intentions. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(3), 395-408.
- Moayerian, N., McGehee, N. G., and Stephenson, Jr., M. O. (2022). Community cultural development: Exploring the connections between collective art making, capacity building and sustainable community-based tourism. *Annals of Tourism Research*. 93(March). 103355
- Polzella, D. J. (2017). Prosocial/civic interests, prosocial/civic behaviors, and participation in the arts.
- Pour, M. J., Hosseinzadeh, M., and Mahdiraji, H. A. (2021). Exploring and evaluating success factors of social media marketing strategy: a multi-dimensional-multi-criteria framework. *Foresight*, 23(6). 655-678.

Van de Vyver, J., Abrams, D., Spinner, L., Pelletier, J., Ali, S. Y., and Kapantai, I. (2019). Participatory arts interventions promote interpersonal and intergroup prosocial intentions in middle childhood. *Journal of Applied Developmental Psychology*, 65, 101069

Summary Brief

All In on the Fusion Dining Experience

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Fusion cuisine refers to a cooking style that blends ingredients and techniques from various culinary traditions (Stano, 2014). As a product of cultural intermixing (Spence, 2018) and a symbol of globalization in food culture (Yıkımsı et al., 2024), it offers a rich context for examining how consumers navigate novelty, familiarity, and identity in dining choices. Guided by self-congruity theory and uncertainty reduction theory, this study investigates U.S. consumers' fusion food consumption behaviors using 467 online survey responses. Symmetric analysis revealed that self-congruity, emotional attachment, and attitude mediate the relationships between food perceptions and consumer intentions, while uncertainty avoidance and attitudinal ambivalence act as moderators. Asymmetric analysis further uncovered multiple configurations of these factors that lead to high behavioral intentions, highlighting the complex and multifaceted nature of consumer decision-making. The findings contribute to the theoretical understanding of consumer behavior and offer actionable insights in promoting memorable dining experiences.

Introduction

Dining out remains a vital part of American life, with the U.S. foodservice sector projected to contribute nearly 6% to the nation's GDP and generate \$1.4 trillion in sales in 2024, employing 14.2 million people, half of whom are minorities—well above the national workforce average (National Restaurant Association [NRA], 2024). This growing diversity, along with heightened interest in ethnic culture and cuisine, has fueled the expansion of ethnic restaurant concepts nationwide (Roseman, 2006). Among these, fusion cuisine—blending ingredients and techniques from different culinary traditions (Stano, 2014)—has emerged as one of the fastest-growing trends, recognized for its cultural intermixing (Spence, 2018) and global appeal (Yıkımsı et al., 2024). Popular examples in the U.S. include Asian fusion, which merges flavors from multiple Asian countries, and Tex-Mex, which combines Southwestern U.S. and Mexican influences (Stano, 2014). Despite its rising popularity, research on the fusion restaurant segment remains limited, with prior studies often treating the ethnic restaurant sector as a homogeneous group and focusing mainly on culinary characteristics rather than consumer attitudes and behaviors (Liu et al., 2020; Alang, 2023). Drawing on self-congruity theory and uncertainty reduction theory, this study examines U.S. consumers' fusion food consumption behaviors. Specifically, it aims to (1) propose and test a framework identifying predictors and mediators influencing fusion food dining behaviors, (2) assess the moderating roles of uncertainty avoidance and attitudinal ambivalence, and (3) provide practical insights for developing effective marketing strategies to attract and retain fusion restaurant customers.

Key Findings

Using a mixed-method approach, this study confirms the structural relationships between consumers' food perceptions and behavioral intentions in fusion restaurants, with self-congruity, emotional attachment, and attitude serving as mediators, and uncertainty avoidance and attitudinal ambivalence as moderators. Results identify food innovativeness and authenticity as critical drivers of emotional engagement, which in turn influence willingness to pay more and intention to share experiences on social media. Academically, the study extends hospitality literature by contextualizing affective psychological constructs within fusion dining, highlighting the interplay of innovativeness, authenticity, and emotional responses in culturally blended culinary settings. Practically, these insights offer fusion restaurant operators' guidance on leveraging authenticity and creative innovation to strengthen customer attachment, reduce decision uncertainty, and foster both repeat visits and positive word-of-mouth.

References

Spence, C. (2018). Contemporary fusion foods: How are they to be defined, and when do they succeed/fail? *International Journal of Gastronomy and Food Science*, 13, 101-107.

Yıkımsı, S., Türkol, M., Abdi, G., Imre, M., Alkan, G., Aslan, S. T., ... & Aadil, R.M. (2024). Culinary trends in future gastronomy: A review. *Journal of Agriculture and Food Research*, 101363.

SESSION 23.6: FROM SIDELINES TO SHOWTIMES: LOYALTY ACROSS SPONSORSHIPS AND SHARING

Moderators:

Sudipto Sarkar

Summary Brief

The Power of a Travel Companion: Elevating Loyalty Through Sharing Service Recovery

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The current research explores loyal customers' responses to service failure and recovery when they are accompanied by a companion. Across three experiments, we show that the presence of a companion enhances customers' satisfaction, which in turn boosts patronage intentions, especially among low-tier loyalty members. In particular, we demonstrate that this companion effect is more pronounced when customers perceive that recovery benefits are offered due to their loyalty status rather than by luck, indicating the importance of strategically communicating compensation for service recovery.

Introduction

The main focus of many marketers has often been on providing special treatment to their loyalty program customers. Such a prioritization strategy has been shown to generate positive marketing performance, including enhanced customer relationships and profits. Yet, what if a loyal customer has a companion? While past research reports that loyal customers who share benefits with a companion may feel more special (Cao, 2021; Lisjak et al., 2021; McFerran & Argo, 2014), it primarily focuses on positive service encounters (e.g., receiving an upgrade as part of membership benefits). The goal of this research is to explore how loyalty program customers who have a companion respond to marketing perks offered after experiencing a service failure (e.g., receiving an upgrade after a long wait at check-in). We examine both positive and negative experiences. It is not clear how loyalty customers who are accompanied feel in these mixed situations.

Specifically, this research focuses on lower-tier loyalty members, who do not usually expect much from loyalty programs. We find that when these customers receive special treatment and can share it with a companion, they often feel more satisfied, partly because they believe the company is rewarding their loyalty. We demonstrate when and why customers who are accompanied feel more positively about recovery benefits following a service failure. These findings can help marketers design better loyalty programs, especially in the hospitality sector, where customers are actively joining multiple loyalty programs.

Background

It is common for service marketers to try to build loyalty by offering target customers special perks (e.g., room upgrade, welcome gift). These perks can either be earned through previous loyalty or given randomly. Generally, customers tend to appreciate earned perks more than random ones because they feel that they have deservedly attained higher status. In contrast, random perks can make customers feel uncomfortable because they cannot be easily justified.

However, what if customers are offered special perks after experiencing a service failure? Do these perks work the same way, especially when customers are sharing them with a companion? Our research explores these issues by testing when and why recovery perks shared with a companion lead to enhanced satisfaction and patronage intentions. Specifically, drawing on diminishing sensitivity theory (Kahneman & Tversky, 1979; Nowlis & Simonson, 1996) and expectation disconfirmation theory (Diehl & Poynor, 2010; Oliver et al., 1994), we propose that low-tier (vs. high-tier) customers will respond more favorably to shared recovery perks in the presence of a companion. Their service expectations are relatively low, so sharing those perks with a companion makes them more special. In contrast, high-tier customers already have greater expectations, so additional perks for their companion do not stand out. Furthermore, we examine whether the companion effect can be driven by how low-tier customers interpret the reason for the perk. That is, we predict that if they believe that the perks were given due to their loyalty (vs. luck), they will be more likely to exhibit positive evaluations of the services.

Method

We conducted three scenario-based studies to investigate how loyalty status and having a companion jointly influence customer reactions to service recovery. In Study 1, hotel loyalty members imagined that they were checking in as a high- or low-tier customer, where they experienced a service failure (e.g., check-in delay) and received recovery perks (e.g., room upgrade). Half the participants also imagined being accompanied by a companion who received the same benefits, and half were told they were alone. As predicted, our results showed that only low-tier customers felt more satisfied and were more likely to return in the presence (vs. absence) of a companion.

We replicated this finding in Study 2, in which airline travelers experienced a service failure (e.g., flight delay) and received recovery benefits (e.g., seat upgrade). Again, we observed a similar pattern. In Study 3, we tested the underlying mechanism of the companion effect among low-tier customers. We varied whether the upgrade was offered due to their loyalty status or random luck. Our results showed that when the recovery benefits were attributed to their status, rather than luck, customers who were accompanied (vs. unaccompanied) responded more favorably.

Discussion

Across three studies, we demonstrate that customer loyalty is not simply about what perks customers receive—it is also about whether there is someone else to share them with. For customers with low-loyalty status, receiving recovery benefits with (vs. without) a companion made the whole service experience feel more special. These customers' behavioral loyalty improved, especially when the benefit was perceived to be caused by their loyalty status. However, for customers with high-loyalty status, the presence of a companion did not produce the same positive effect.

These findings help explain how customer status and social context combine to influence customers' behavioral loyalty. In particular, they suggest that service firms should not take a one-size-fits-all approach to recovery perks. Rather, these firms should tailor their special perks based not just on loyalty status, but also on whether the customer has a companion.

References

- Cao, Z. (2021). The impact of social visibility of VIP services on satisfaction. *Journal of Services Marketing*, 35(5), 647–656.
- Diehl, K., & Poynor, C. (2010). Great expectations?! Assortment size, expectations, and satisfaction. *Journal of Marketing Research*, 47(2), 312–322.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–291.
- Lisjak, M., Bonezzi, A., & Rucker, D. D. (2021). How marketing perks influence word of mouth. *Journal of Marketing*, 85(5), 128–144.
- McFerran, B., & Argo, J. J. (2014). The entourage effect. *Journal of Consumer Research*, 40(5), 871–884.
- Nowlis, S. M., & Simonson, I. (1996). The effect of new product features on brand choice. *Journal of Marketing Research*, 33(1), 36–46.
- Oliver, R. L., Balakrishnan, P. S., & Barry, B. (1994). Outcome satisfaction in negotiation: A test of expectancy disconfirmation. *Organizational Behavior and Human Decision Processes*, 60(2), 252–275.

Summary Brief

The Mediated Role of Brand Fit on Brand Satisfaction in the Context of Concert Sponsorship

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Prior research has examined brand alliances, co-branding, event sponsorship, and celebrity spokespersons in branding research. Few studies have examined brand fit in concert sponsorship and how it impacts brand satisfaction. Hence, this study focuses on evaluating whether performing act impacts brand satisfaction through brand fit as a mediator in the domain of music concert sponsorship.

Introduction

According to IBIS World (2025) research, the concert and event promotion industry in US has earned about \$62.5 billion in revenue which highlights the importance of popularity of concerts including music concerts. Prior research has examined celebrity spokesperson (Misra and Beatty, 1990), concert sponsorship (Sen et al. 2025), sporting event (Gwinner and Bennett, 2008), co-branding in hotels (Lin, 2013) in branding literature. Few studies have examined brand fit and brand satisfaction in concert sponsorship area. Hence, this study focuses on the existing brand literature by evaluating whether the performing act (singer/band) impacts brand fit and brand satisfaction in the context of concert sponsorship.

Sponsorship

Sponsorship can be defined as an investment in any activity, cause, or event (Becker-Olsen, 2003). Existing sponsorship literature examined brand awareness (Cornwell, Ray, and Steinhard 2001; Johar and Pham, 1999), brand image (Gwinner, 1997). Moreover, brand-equity highlights consumers' brand knowledge on their responses to brand marketing including advertising and promotion (Keller, 1993). Moreover, primary brand associations such as attributes and beliefs as well as secondary associations such as, celebrity spokespersons and events can also transfer to a brand (Ruth and Simonin, 2003).

Hypotheses

The focus of this study is how sponsorship affects consumer judgments through brand fit and brand satisfaction in the context of music concert. Prior studies have examined perception of congruence between sponsor and event (Speed and Thompson, 2000), the role of fit in determining consumers' evaluations of sponsorships (Becker-Olsen and Simmons, 2002). Furthermore, Becker-Olsen and Simmons (2002) found that fit affects behavioral intentions through affective (attitudinal) and cognitive (belief structure). However, using social identity framework, Madrigal (2000) focused on fit between consumers' interests and sponsored event (Becker-Olsen, 2003).

Brand satisfaction can be defined as a positive emotional feeling resulting from fulfilment of a desire from brand consumption (Mano and Oliver, 1977). Satisfaction includes both cognitive and emotional components where cognitive component refers customer's evaluation of perceived performance is compared with expectation standards (Ha and Perks, 2005; Liljander and Strandvik, 1997) and the emotional component refers to emotions, such as happiness, surprise and disappointment (Cronin et al. 2000; Oliver, 1993; Yu and Dean, 2001). Moreover, identification of a brand with consumers occurs at personal level involving values and beliefs (Bhattacharya and Sen, 2003) and at social level where brands act as aspirations and status of consumers (Tuskej et al. 2013). Furthermore, brand experience also contributes towards brand satisfaction (Brakus, Schmitt, and Zarantonello, 2009). Therefore, we suggest brand satisfaction as an outcome variable which would be impacted by the individual variables which are performing act and the concert experience on the attendees, thereby extending the effect to future brand-related behavior. Thus, we propose

H1: Attitude towards the performing act has a significant effect on Brand Satisfaction.

H2: Feelings towards the concert have a significant effect on Brand Satisfaction.

Brand fit refers to a match of personality and attribute between two brands (Misra and Beatty, 1990), as well as the fit between a celebrity and a product brand name with respect to attributes and belongingness leading to consumer attitude towards a brand (Till and Busler, 2000). Prior research has been done in this area through examining brand alliances (Riley, Charlton, and Wason, 2015; Su and Kunkel 2019), co-branding (Ashton and Scott, 2011; Lin, 2013), corporate social responsibility (Bigne, Curras-Perez, and Aldas-Manzano, 2012; Gilal et al. 2021) and event sponsorships (Gwinner and Bennett, 2000). In sponsorship literature, fit has been described as relevance or compatibility (Johar and Pham, 1999; Rifon et al. 2004). Furthermore, the perceived fit between event and sponsor can also influence consumer attitudes, belief, and behavioral intentions (Becker-Olson, 2003). Fit is also an underlying cause for the transfer of affect and creation of synergy in sponsorships (Becker-Olsen, 2003; Ruth and Simonin, 2003). Thus, based on existing research findings, we believe that the perceived brand fit will strengthen the cognitive effect of the performing act and the concert experience on the attendee's cognitive evaluation of the sponsor brand and future cognitive actions. The following hypotheses are proposed:

H3: Brand fit mediates the impact of attitude towards the performing act on Brand Satisfaction.

H4: Brand fit mediates the impact of feelings towards the concert on Brand Satisfaction.

Findings and Implications

An interesting finding in our results is the role of brand fit as a mediator in impacting brand satisfaction through the relationship between the performing act and the concert experience. It can be assumed that the affective reaction of consumers and cognitive evaluation through brand fit influenced brand satisfaction. Moreover, the significance of direct effect of the performing act experience and feelings towards the concert on brand satisfaction in our findings highlighted the importance of sponsors with specific brand and product related properties.

References

- Adisak, S. (2022). The influence of customer expectations, customer loyalty, customer satisfaction and customer brand loyalty on customer purchasing intentions: A case study of K-POP fans in Thailand. *African Journal of Business Management*, 16(1), 1–9.
- Ashton, A. S., & Scott, N. (2011). Hotel restaurant co-branding: The relationship of perceived brand fit with intention to purchase. *Journal of Vacation Marketing*, 17(4), 275-285.
- Becker-Olsen, K. L. (2003). And now, a word from our sponsor--a look at the effects of sponsored content and banner advertising. *Journal of Advertising*, 32(2), 17-32.
- Becker-Olsen, K., & Simmons, C. J. (2002). When do social sponsorships enhance or dilute equity? Fit, message source, and the persistence of effects. *Advances in consumer research*, 29(1).
- Bhattacharya, C. B., & Sen, S. (2003). Consumer–company identification: A framework for understanding consumers' relationships with companies. *Journal of marketing*, 67(2), 76-88.
- Bigné, E., Currás-Pérez, R., & Aldás-Manzano, J. (2012). Dual nature of cause-brand fit: Influence on corporate social responsibility consumer perception. *European Journal of Marketing*, 46(3/4), 575-594.
- Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand experience: what is it? How is it measured? Does it affect loyalty?. *Journal of marketing*, 73(3), 52-68.
- Cornwell, T. B., Roy, D. P., & Steinard, E. A. (2001). Exploring managers' perceptions of the impact of sponsorship on brand equity. *Journal of advertising*, 30(2), 41-51.
- Cronin Jr, J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of retailing*, 76(2), 193-218.

- Gilal, F. G., Paul, J., Gilal, N. G., & Gilal, R. G. (2021). Strategic CSR-brand fit and customers' brand passion: Theoretical extension and analysis. *Psychology & Marketing*, 38(5), 759-773.
- Gwinner, K. (1997). A model of image creation and image transfer in event sponsorship. *International marketing review*, 14(3), 145-158.
- Gwinner, K., & Bennett, G. (2008). The impact of brand cohesiveness and sport identification on brand fit in a sponsorship context. *Journal of Sport Management*, 22(4), 410-426.
- Ha, H. Y., & Perks, H. (2005). Effects of consumer perceptions of brand experience on the web: Brand familiarity, satisfaction and brand trust. *Journal of consumer behaviour: An international research review*, 4(6), 438-452.
- IBIS World (2025). Concert & Event Promotion in the US – Marekt Research Report (2015 – 2030). Accessed at: <https://www.ibisworld.com/united-states/industry/concert-event-promotion/1960/>
- Johar, G. V., & Pham, M. T. (1999). Relatedness, prominence, and constructive sponsor identification. *Journal of marketing research*, 36(3), 299-312.
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of marketing*, 57(1), 1-22.
- Liljander, V., & Strandvik, T. (1997). Emotions in service satisfaction. *International Journal of service industry management*, 8(2), 148-169.
- Lin, Y. C. (2013). Evaluation of co-branded hotels in the Taiwanese market: the role of brand familiarity and brand fit. *International Journal of Contemporary Hospitality Management*, 25(3), 346-364.
- Madrigal, R. (2000). The influence of social alliances with sports teams on intentions to purchase corporate sponsors' products. *Journal of advertising*, 29(4), 13-24.
- Mano, H., & Oliver, R. L. (1993). Assessing the dimensionality and structure of the consumption experience: evaluation, feeling, and satisfaction. *Journal of Consumer research*, 20(3), 451-466.
- Misra, S., & Beatty, S. E. (1990). Celebrity spokesperson and brand congruence: An assessment of recall and affect. *Journal of business research*, 21(2), 159-173.
- Oliver, R. L. (1993). Cognitive, affective, and attribute bases of the satisfaction response. *Journal of consumer research*, 20(3), 418-430.
- Rifon, N. J., Choi, S. M., Trimble, C. S., & Li, H. (2004). Congruence effects in sponsorship: The mediating role of sponsor credibility and consumer attributions of sponsor motive. *Journal of advertising*, 33(1), 30-42.
- Riley, D., Charlton, N., & Wason, H. (2015). The impact of brand image fit on attitude towards a brand alliance. *Management & Marketing*, 10(4).
- Ruth, J. A., & Simonin, B. L. (2003). "Brought to you by Brand A and Brand B" Investigating multiple sponsors' influence on consumers' attitudes toward sponsored events. *Journal of advertising*, 32(3), 19-30.
- Sen, S., Sarkar, S., Watson, A., & Fowler, J. G. (2025). Testing the assumptions of concert sponsorship: Does the performer impact purchase intentions?. *Journal of Global Scholars of Marketing Science*, 1-20.
- Su, Y., & Kunkel, T. (2019). Beyond brand fit: The influence of brand contribution on the relationship between service brand alliances and their parent brands. *Journal of Service Management*, 30(2), 252-275.
- Speed, R., & Thompson, P. (2000). Determinants of sports sponsorship response. *Journal of the academy of marketing science*, 28(2), 226-238.

- Till, B. D., & Busler, M. (2000). The match-up hypothesis: Physical attractiveness, expertise, and the role of fit on brand attitude, purchase intent and brand beliefs. *Journal of advertising*, 29(3), 1-13.
- Tuškej, U., Golob, U., & Podnar, K. (2013). The role of consumer–brand identification in building brand relationships. *Journal of business research*, 66(1), 53-59.
- Yu, Y. T., & Dean, A. (2001). The contribution of emotional satisfaction to consumer loyalty. *International journal of service industry management*, 12(3), 234-250.

SESSION 23.7: FROM SHELF TO SCROLL, STRATEGY MATTERS

Moderators:

David Kays

Summary Brief

An Initial Look at Understanding Prosocial Behaviors in Self-Service: The Influence of Self-Construal and Retail Cues

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Retail environments are shifting towards self-service technologies, particularly self-checkouts, which may impact charitable giving due to reduced interpersonal interactions. This research investigates how consumers' self-construal affects their willingness to donate during selfcheckout. It suggests that digital prompts highlighting community impact can simulate social presence and encourage donations. Consumers with interdependent self-construal may respond better to socially framed appeals, while those with independent self-construal may prefer selffocused messages. The study aims to understand the psychological factors influencing donation behavior in self-service settings and provide insights for effective charitable campaigns.

Introduction

Retail settings are rapidly evolving through the integration of self-service technologies, particularly self-checkout systems that allow consumers to complete purchases with minimal human interaction. As self-service checkouts increasingly replace human cashiers, the psychological dynamics influencing prosocial behavior, such as charitable giving, warrant closer examination. Charitable donations collected at checkout help support many important causes, such as disaster relief and food programs. However, as self-checkout systems reduce direct interpersonal interaction, findings suggest they also reduce many social pressures traditionally associated with prosocial behavior. In fact, donation rates at self-service kiosks are about 30% lower than at staffed registers (Hanks et al., 2016; Statista, 2023). Our research explores how consumers' self-construal influences their willingness to donate to philanthropic causes during self-service checkout. While behaviors may change, we posit that retail cues through digital prompts in self-service environments can simulate a sense of social presence to mitigate the challenges created by the absence of interpersonal interactions. For example, by highlighting the actions of others or suggesting the community impact, retailers and charity organizations may overcome some of the challenges related to reduced donations at self-service checkout (Chen et al., 2019). Specifically, we propose that cues may interact with individual differences in selfconstrual, such that consumers with an interdependent self-construal, who define the self in relation to others, should be more responsive to socially framed donation appeals. On the other hand, those with independent self-construal may be more influenced by self-focused messages (Ye et al., 2015; Simpson, White, & Laran, 2018). Across a series of experiments, we aim to examine how donation framing (social vs. personal) and contextual cues (presence vs. absence of simulated social norms) affect donation behavior at self-checkout. Our goal is to better understand the psychological mechanisms influencing consumer charitable decision-making in self-service retail contexts and offer insights for retailers and charitable organizations in designing more effective donation campaigns.

Background

While donation behavior has been studied in interpersonal and online settings, little is known about how prosocial behavior unfolds in automated retail environments. Self-checkout reduces normative pressures associated with human presence, potentially lowering donation rates (Wu, Gao, & Mattila, 2017). Previous research demonstrates that interdependent consumers are more likely to respond to community-oriented or norm-based appeals, while independent consumers are more receptive to self-enhancing or self-focused messages (Ye et al., 2015; Winterich, Mittal, & Ross, 2009). Similarly, research shows that framing donation appeals in ways that align with consumers' regulatory orientations can significantly affect behavior (Park & Ryu, 2018). Digital cues that mimic social presence, such as highlighting community participation, have also been found to increase donation likelihood (Chen et al., 2019; Gao et al., 2021). However, these findings have not been fully applied to self-service retail contexts, where direct human interaction is minimized. This research addresses this gap by examining how selfconstrual and simulated social cues jointly influence charitable giving at self-checkout.

Research Questions

This study is guided by three key questions. First, how does self-construal (independent vs. interdependent) influence donation behavior in self-service retail contexts? Second, to what extent do simulated social presence cues mitigate the absence of interpersonal interaction at selfcheckout? Third, how do message frames (social vs. personal) interact with self-construal orientations to shape consumers' willingness to donate?

Conceptual Framework

The proposed conceptual framework suggests that prosocial behavior at self-checkout is shaped by the interaction between consumers' self-construal orientations and retail cues that simulate social norms. Interdependent consumers are expected to respond more positively to socially framed appeals emphasizing community impact (Das & Roy, 2019; Gao et al., 2021), while independent consumers are predicted to be more motivated by self-focused appeals that highlight personal agency and individual choice (Fazeli et al., 2020; Winterich et al., 2009). Normative digital cues, such as “many shoppers have donated,” are expected to amplify donation behavior by reintroducing a sense of social presence, with particularly strong effects among interdependent consumers (Chen et al., 2019).

Proposed Methodology

To investigate these questions, we propose a mixed-method design beginning with an online survey experiment. Respondents will be recruited through an online research panel to ensure demographic diversity. Participants will be randomly assigned to one of two experimental conditions that vary in donation framing (socially framed vs. self-focused messages) and the presence or absence of simulated social cues (e.g., “most shoppers in your community have donated” versus a standard donation request statement). Each condition will be embedded within a designed online simulation of a self-checkout interface, allowing respondents to experience the donation prompt as it would appear in a retail environment. Following exposure to the scenario, respondents will complete a survey that captures donation intentions, perceived social presence, message persuasiveness, and self-reported self construal (Simpson et al., 2018; Ye et al., 2015). Manipulation checks will ensure that message framing and social presence cues were perceived as intended. Donation behavior will be measured both in terms of willingness to donate and the amount pledged. Data will be analyzed using regression models and interaction tests to examine how self-construal moderates the effects of message framing and contextual cues.

Discussion

This research contributes to both marketing and consumer psychology. Our study extends self-construal research into automated retail environments where normative social pressures are diminished. It also advances knowledge on how simulated social presence can restore prosocial behavior in digitalized spaces (Chen et al., 2019). Practically, it demonstrates that message framing and contextual cues can be strategically employed to sustain prosocial behavior in selfservice settings. For retailers and nonprofit organizations, tailoring appeals—socially framed for interdependent consumers and personally framed for independent consumers—offers a pathway to increase donations and improve customer satisfaction.

Conclusion

As retail continues to migrate toward automation, understanding the mechanisms of prosocial behavior at self-service checkout becomes increasingly urgent. This study highlights the role of self-construal and digital social cues in shaping charitable giving. By designing donation prompts that align with consumers' self-views and by simulating social presence, retailers and charitable organizations can preserve the vital role of checkout donations in supporting social causes. Ultimately, this research highlights the need to design human-centered digital retail environments that sustain both efficiency and generosity.

References available upon request

Full Paper

Brand Strategy in Package Design: A Strategic Perspective on Consumer Attitudes and Purchase Intentions in the Cosmetic Industry

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This study explores how brand image and brand personality, as expressed through cosmetic package design, influence consumer attitudes and purchase intentions. Based on a sample of 131 participants from three U.S. regions, five global cosmetic brands were analyzed. The findings show that alignment between a brand's intended image and personality and consumers' perceptions via package design significantly impacts behavior. Brands like Olay, Estée Lauder, and L'Oréal, which maintained high consistency, saw stronger consumer responses. In contrast, Neutrogena and Hera, with mismatches between planned and perceived identities, received weaker reactions. Additionally, consumer attitudes toward the package were found to mediate the effects of both brand image and personality on purchase intention. These results suggest that package design is not only a visual element but also a strategic tool for conveying brand identity. The study enriches branding literature by highlighting the package's dual role in visual communication and psychological engagement with consumers.

Introduction

In today's hypercompetitive global market, brand image has become a core strategic asset for companies striving to maintain long-term competitive advantage (Aaker, 2014; Balmer & Greyser, 2006). As product functionality becomes increasingly homogeneous across categories, particularly in mature markets, firms are turning to intangible brand elements—such as image, identity, and perception—to create meaningful differentiation (Keller, 2013). This shift is largely driven by rapid advancements in information technology, the proliferation of digital communication channels, and the rise of the experience economy, where consumers seek emotional and symbolic value in addition to utility.

Among various brand expression tools, package design has emerged as a key platform for brand communication. Expressive visual package designs are employed to support marketing communications and brand strategies especially in consumer product categories, where product differentiation is a necessity (Meyers and Gerstman, 2005, Young, 2004). As the most immediate and tangible point of contact between a product and a consumer, packaging serves both aesthetic and functional purposes. More importantly, it operates as a strategic interface that conveys the brand's visual identity and reinforces its positioning. In the cosmetics industry—where product categories are highly saturated and emotional connection plays a central role in consumer decision-making—the importance of effective package design becomes particularly pronounced.

Cosmetic products are not merely seen as tools for enhancing physical appearance; they are embedded with symbolic meanings of self-expression, identity, and lifestyle. In this context, the ability of packaging to faithfully reflect the intended brand image is not a matter of visual appeal alone—it is a determinant of trust, emotional resonance, and ultimately purchase behavior (Underwood & Klein, 2002; Silayoi & Speece, 2007; Magnier & Schoormans, 2015). When consumers perceive inconsistency between brand presentation and their expectations, it can lead to cognitive dissonance, brand disengagement, and diminished purchase intention.

Despite the importance of this alignment, empirical research remains limited on how brand image is embedded in package design and how this visual representation is interpreted by consumers. This study seeks to fill that gap by exploring how well the brand image—articulated in corporate strategy—is visually translated into package design, and how consumers' perceptions of that design affect their product attitudes and purchase intentions.

To address these questions, the study focuses on five global cosmetic brands operating in the United States. Using a combination of content analysis, factor analysis, and regression techniques, the study investigates: (1) the consistency between planned and perceived brand image, and (2) the impact of perceived brand image on consumer

attitudes and behavioral intentions. By developing and testing an integrated model, the study aims to provide theoretical insights and managerial implications regarding the strategic role of package design in brand communication and consumer decision-making.

Theoretical Background

Brand Strategy and Package Design in the Cosmetic Industry

In brand management literature, the importance of delivering a coherent brand identity across all consumer touchpoints has been extensively documented (Keller, 2003; Aaker, 1996). Among these touchpoints, package design plays a dual role: as a functional element protecting the product and as a symbolic artifact embodying the brand's values, promise, and story (Underwood, 2003). Especially in the cosmetics industry—where sensory appeal, design aesthetics, and psychological meaning drive consumer preferences—packaging is arguably one of the most influential brand expression channels (Ampuero & Vila, 2006).

Cosmetic package must communicate more than product type or function. It must project aspirational qualities such as luxury, purity, confidence, or sophistication—aligning with the emotional and lifestyle goals of target consumers (Keller, 2008). Given that cosmetics are often purchased not just for functional use but as expressions of identity, the way a product is packaged can significantly affect how consumers perceive the brand itself (Belk, 1988).

A package that visually conveys the intended brand image contributes to consistent brand storytelling (Schmitt & Simonson, 1997). Conversely, a mismatch between intended identity and perceived design can result in weakened brand equity (Keller, 1993). Therefore, strategic alignment between brand image and design execution is critical. The effectiveness of this alignment is best assessed by examining the degree to which consumers perceive the visual cues embedded in packaging as consistent with the brand's core message (Underwood & Klein, 2002).

Brand Image as a Strategic Construct

Brand image refers to the totality of consumer perceptions, beliefs, and associations related to a specific brand. Keller (1993) defined brand image within the framework of associative memory networks, asserting that it encompasses the emotional and cognitive links formed by consumers through exposure to brand stimuli. In this model, brand image influences recall, recognition, and overall consumer evaluation. A strong, favorable brand image helps consumers differentiate among similar products and serves as a shortcut for decision-making in high-involvement categories like cosmetics.

Kapferer (1992) emphasized the role of brand image in the “reflection” component of the Brand Identity Prism—how the brand is perceived in terms of the typical user or usage scenario. From a strategic standpoint, the coherence between a company's projected brand image and the image perceived by consumers is essential. Inconsistent brand cues weaken the brand's position and can dilute emotional impact.

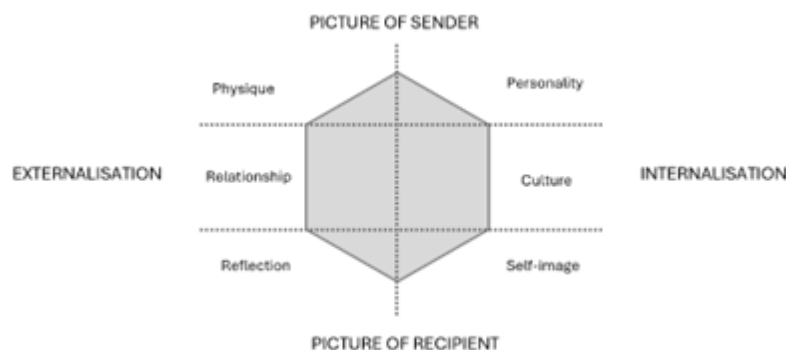


Figure 1. Brand Identity Prism

Roberts (2004, 2005) advanced the emotional dimension of brand image by proposing three affective categories: Mystery, Sensuality, and Intimacy. These dimensions offer a valuable lens for evaluating cosmetic package:

Mystery encompasses narrative, history, and aspiration.

Sensuality includes multisensory appeal—touch, sight, scent, and more.

Intimacy reflects emotional closeness, empathy, and loyalty.

Building on Roberts' framework, Cho (2011) developed a measurement scale for brand image, particularly applicable in product categories where emotional and symbolic value are high. This study applies that scale to analyze how effectively package designs communicate key brand image dimensions to consumers.

Brand image is multidimensional, including attributes (product-related and non-product-related), benefits (functional, symbolic, emotional), and attitudes. A successful brand image strategy requires that all these dimensions be reflected in the consumer experience—beginning with first impressions formed at the point of visual contact: the product package.

Consumer Attitudes and Purchase Intentions

Consumer attitudes serve as a core predictor of behavioral intention and have been studied extensively in both psychology and marketing. Defined as learned predispositions to respond favorably or unfavorably toward a brand, attitudes comprise cognitive, affective, and behavioral components. In the context of cosmetics, attitudes are shaped by a combination of direct experience, brand imagery, social influence, and perceived self-congruence.

The Theory of Reasoned Action (Fishbein & Ajzen, 1975) positions attitude as a major determinant of intention, moderated by perceived norms. This theory is particularly relevant in industries where social identity and visual presentation are important, such as cosmetics. Here, consumer evaluation is not limited to performance but includes symbolic alignment with personal and cultural ideals.

Purchase intention, in turn, is the cognitive precursor to actual behavior. It reflects the consumer's willingness and preparedness to buy, and is influenced by both attitude and contextual variables. For high-involvement products like cosmetics, purchase intentions are shaped by evaluations of product quality, brand trust, aesthetic fit, and emotional appeal.

Package plays a significant role in forming both attitudes and intentions. As the bridge between brand strategy and consumer experience, effective package design supports positive attitude formation and increases the likelihood of purchase. Consumers often interpret package as a signal of product quality, brand values, and reliability—thus making package a silent yet powerful driver of consumer choice.

Research Model and Hypotheses

This study investigates the relationship between cosmetic brand package design, brand strategy, consumer attitude, and purchase intention. As a core axis of marketing activities, brand strategy plays a critical role in product positioning and enhancing product value. Simultaneously, package design functions as a vital component of brand management, serving as a medium through which brand messages are communicated. This empirical study aims to explore how the elements of brand strategy—specifically brand image—reflected in cosmetic package design influence consumer perception, brand attitude, and ultimately, purchase intention.

Brand Strategy and Package Design in Global Cosmetic Brands

A brand serves to distinguish a company's products from those of competitors, create a favorable image of quality in consumers' minds, and contribute directly to corporate performance by increasing market share (Keller, 2003). As a central component of marketing strategy, brand strategy aims to enhance product image and strengthen communication with consumers. Its ultimate objective is to establish a coherent alignment between the product (or company) and the target consumer (Aaker, 1996).

Brand strategy functions as an integrated marketing effort that enables differentiation from competitors and fosters a lasting impression in the consumer's mind (Keller, 2008). Companies utilize various tools to reinforce their brand identity, one of the most critical being the product package. The package, as the tangible vessel of the product, is essential not only for functional purposes such as protection and delivery but also as a visual communication tool. It incorporates design elements such as shape, color, and imagery to convey meaning, influence perceptions, and support marketing communications (Orth & Malkewitz, 2008). Visual cues on the package play a significant role in shaping consumer attitudes and enhancing product appeal.

As discussed earlier, the role of the package is particularly pivotal in the cosmetics industry. Beyond its protective function, the package serves as a primary medium for brand communication and product positioning. Most cosmetic products—being liquid, gel, or powder-based—are difficult to differentiate without external visual identifiers. Therefore, the package becomes the key interface through which consumers recognize, evaluate, and distinguish among competing products (Nancarrow, Wright, & Brace, 1998). In this context, the package is not merely a container but a strategic asset that encapsulates and communicates brand identity and value.

An effective brand strategy entails identifying consumer needs and translating these into products and visual brand cues that meet expectations, thereby achieving a sustainable competitive advantage (Aaker & Joachimsthaler, 2000). To accomplish this, the intended brand message must be clearly defined and integrated into the package design (Underwood & Klein, 2002). That is, the package must consistently and coherently communicate the brand's strategic positioning in the consumer's mind.

Conversely, when dissonance arises between the intended brand personality and the cues conveyed through packaging, consumers may experience confusion or skepticism, undermining brand trust and emotional connection. This incongruity can generate cognitive dissonance (Festinger, 1957), leading to negative attitudes, reduced purchase intention, and ultimately, the erosion of brand equity (Japutra & Molinillo, 2019).

Accordingly, in the cosmetics industry, the package design functions as a crucial medium through which the brand strategy is operationalized and conveyed. Based on this rationale, the following hypothesis is proposed:

Hypothesis 1. Cosmetic brand packages are designed to consistently reflect the brand image of the company.

Package Design, Brand Strategy, Consumer Attitude, and Purchase Intention in Global Cosmetic Companies

Consumer attitude refers to a consumer's overall evaluation of a product or brand, encompassing feelings, beliefs, and behavioral intentions toward it (Solomon et al., 2015). It is shaped by both emotional and cognitive factors and plays a pivotal role in influencing consumer behavior, including preference and purchase decisions. A favorable consumer attitude often leads to a stronger consumer preference, as consumers tend to choose products they perceive positively over competing alternatives.

Consumer preference for a product or brand can be defined as the tendency to choose a product that provides greater value among several alternatives, while showing acceptance even toward average or below-average products (Kotler & Keller, 2016). In essence, preference refers to the consumer's inclination to favor one product over competing ones.

The consumer decision-making process typically begins with the recognition of a need or want for a product. This is followed by information search, evaluation of alternatives, purchase, and post-purchase evaluation (Schiffman & Wisenblit, 2015). Package design plays a critical role in the early stages of this process by attracting attention and stimulating information search. It can act as a visual cue that triggers consumer awareness and influences perception during the decision-making journey (Underwood, 2003).

Package design not only conveys physical attributes of the product but also serves as a visual expression of the brand's message and identity (Orth & Malkewitz, 2008). A well-executed package design can attract consumers' attention, effectively communicate the brand message, and shape a positive brand image—ultimately enhancing consumer preference and purchase intention (Ampuero & Vila, 2006).

From a branding strategy perspective, companies aim to consistently convey a planned brand image through visual and verbal elements. Package design is an essential component of this strategy, acting as a medium

through which the brand communicates its values and promises to the consumer. When the planned brand image (the image the brand intends to deliver) aligns with the perceived brand image (the image received and interpreted by consumers), it can significantly enhance consumer trust and brand preference.

Based on this theoretical background, the following hypotheses are proposed:

Hypothesis 2. When the package design of a cosmetic brand aligns the planned brand image with the perceived brand image, it will have a positive effect on consumer attitude for the product.

Hypothesis 3. When the package design of a cosmetic brand aligns the planned brand image with the perceived brand image, it will have a positive effect on consumers' purchase intention.

Mediating Role of Consumer Attitude Between Brand Image and Purchase Intention

Purchase intention refers to a consumer's deliberate plan or likelihood to engage in a buying action (Schiffman & Kanuk, 2009; Shao, Baker, & Wagner, 2011). In the global cosmetics industry—marked by symbolic value, emotional engagement, and high consumer involvement—purchase intention is shaped by a complex interplay of brand-driven cues and individual psychological factors.

Among these influences, consumer attitude plays a central role. Attitude reflects a consumer's overall evaluation of a brand based on its communicated attributes, such as brand image. It significantly influences the consumer's motivation to process information, make comparisons, and ultimately engage in purchasing behavior (Fishbein & Ajzen, 1975). A positive attitude toward a cosmetic brand heightens involvement and increases the likelihood of purchase by enhancing emotional connection and perceived value.

As discussed in prior sections, when a cosmetic product's package design effectively conveys the planned brand image, it strengthens consumers' attitudes by reinforcing symbolic meaning and brand trust. This alignment between visual branding and strategic image positioning fosters a sense of brand authenticity and emotional resonance, which, in turn, increases the likelihood of purchase.

Thus, in the context of global cosmetic branding, consumer attitude mediates the relationship between brand image—communicated through package design—and purchase intention. This suggests that even when the design is visually appealing, it is the alignment with brand strategy and the consumer's internalized evaluation that ultimately drives behavior.

Hypothesis 4. When the package design of a cosmetic product effectively reflects the planned brand image, the consumer's attitude will mediate the relationship between the package design and the consumer's purchase intention.

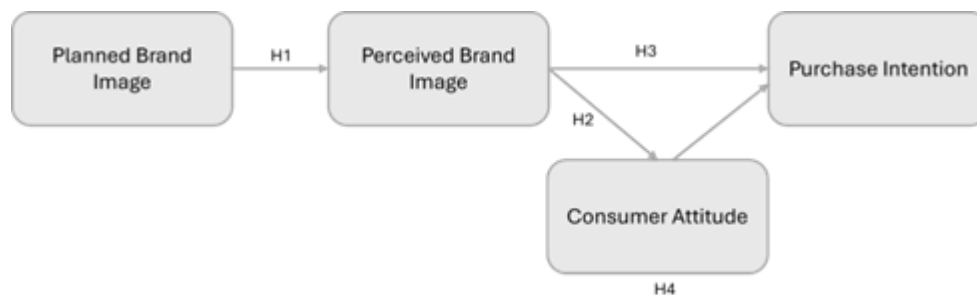


Figure 2. Research Model

Research Methodology

This study adopts a quantitative research design to empirically examine the impact of brand image—conveyed through package design—on consumer attitude and purchase intention within the cosmetics industry. The methodology encompasses sample selection, variable operationalization, and the statistical methods used for data analysis.

Sample and Product Selection

The research focuses on global cosmetic brands where the package plays a critical role in brand strategy. Among cosmetic product categories, CC cream was selected as the standardized research product. This category is widely available across both skincare and makeup brands, enabling consistent cross-brand comparisons.

Moreover, CC creams tend to occupy a premium price range and are strategically positioned to showcase brand innovation and quality. Their functionally comparable nature but diverse branding approaches make them suitable for evaluating the alignment between the package and brand strategy.

The following five global cosmetic brands were selected for the study based on their global visibility, strategic use of the package, and accessibility to brand materials and consumer perception data:



Figure 3. CC Cream Brand Packages

Variables and Data Collection

Respondents ($N = 131$), including students, faculty, and their families from three universities located in the eastern, western, and central regions of the United States, participated in a structured survey conducted via Qualtrics. During the survey, participants were shown product images displaying only the package design of each brand's CC cream, with all advertising and promotional materials removed. This visual-only presentation allowed for the evaluation of perceived brand image based solely on design elements such as color, shape, texture, and visual hierarchy. For each of the five brands, participants responded to 22 items related to brand image and 4 items measuring consumer attitude and purchase intention. After completing the brand-specific sections, respondents answered 6 demographic questions. The survey was designed to be completed within approximately 20 minutes.

Independent Variables: Planned and Perceived Brand Image

The key independent variables are the planned brand image and perceived brand image.

Planned brand image refers to the intended identity and messaging formulated by each company. This was extracted through content analysis, a qualitative method that identifies recurring themes and language patterns in textual materials. Sources included company websites, product pages, brand manifestos, press releases, academic articles, and marketing brochures. Using a structured keyword search guided by Cho's (2011) 22-item Brand Image Scale, core image descriptors for each brand were identified and coded. To enhance accuracy and reliability, the coding process underwent multiple rounds of expert validation and iterative refinement.

Perceived brand image was captured through consumer responses in a structured survey. Participants were shown package images and asked to evaluate the brand image conveyed by each design. No brand name or textual information was provided to ensure an unbiased evaluation of the visual stimulus. This approach allowed the researchers to measure the perceptual gap between the brand's strategic intent and the consumer's interpretation.

Control Variables

To account for individual differences in perception and behavior, demographic variables were collected. These included Age (custom interval scale), Gender, Ethnicity, Educational background, Household income, and Annual cosmetic spending. The items were based on Ishikawa (2013), with minor adaptations for this context.

Dependent Variables: Consumer Attitude and Purchase Intention

Consumer attitude refers to the consumer's overall evaluative disposition toward a brand, encompassing cognitive, affective, and behavioral components shaped by perceived value and experience.

Purchase intention captures the consumer's likelihood or willingness to buy a product, serving as a strong behavioral predictor.

Both were measured using established multi-item Likert-type scales.

Measurement of Brand Image

Brand image was assessed using the Brand Image Scale developed by Eun-Joo Cho (2011), grounded in Roberts' (2004, 2006) emotional framework. The scale includes three dimensions:

Mystery – Reflects symbolic and imaginative associations related to brand history, narrative, or aspiration (6 items).

Sensuality – Captures sensory experiences conveyed through the package, including visual, tactile, and color-based impressions (7 items).

Intimacy – Measures emotional connection, trust, and personal relevance consumers associate with the brand (9 items).

In total, the instrument comprises 22 items, repeated for each brand, using a 5-point Likert scale. Respondents evaluated all five brands individually, enabling within-subject analysis of how package design influences perception across distinct brand contexts.

Results of Data Analysis

Consistency Between Planned and Perceived Brand Image

To evaluate the extent to which the planned brand image—defined by each brand's strategic intent—was effectively perceived by consumers through package design, both content analysis and factor analysis were conducted. Table 1 presents a comparison between the planned brand image, identified via content analysis, and the perceived brand image, derived from consumer responses through factor analysis. The results demonstrated a strong alignment between intended and perceived brand images for Olay, Estée Lauder, and L'Oréal. For instance, Olay's intended image of being “soft and trustworthy” was accurately recognized by the respondents. Estée Lauder successfully projected a “premium” and “elegant” image, while L'Oréal's “trendy” and “global” image was also consistently perceived.

In contrast, Neutrogena's intended image—centered around “scientific credibility” and “dermatological expertise”—was not reflected in consumer perceptions, who instead viewed it as a “practical and reasonably priced” brand, indicating a notable discrepancy. Similarly, for Hera, no explicit corporate-level brand image strategy was identified, yet consumers independently associated the brand with “sensuality.”

Brand	Planned Image	Perceived Image
Olay	Mystery	Mystery
Neutrogena	Intimacy	Mystery
Hera	N/A	Sensuality
Estée Lauder	Sensuality	Sensuality
L'Oréal	Mystery	Mystery

Table 1. Summary of Planned and Perceived Brand Images by Brand (Factor Analysis)

This degree of alignment—or misalignment—between planned brand image and consumer perception served as a critical input in the subsequent regression analyses, which explored their influence on consumer attitudes and purchase intentions.

Correlation and Regression Analysis Assumptions

Descriptive statistics and correlation matrices for the primary study variables—brand image, consumer attitude, and purchase intention—are presented in Tables 4 through 8 (Appendix). These analyses revealed several statistically significant associations, underscoring the interconnected nature of perceptual and behavioral consumer responses. Demographic characteristics of the respondents, summarized in Table 2, were included as control variables to minimize sampling bias and account for heterogeneity across participant profiles.

Demographic Characteristics		
Respondents (N=131)	Mean	Standard Deviation
Age	23.87	6.01
Gender	1.14 (1-Male, 2-Female)	0.49
Ethnicity	2.99 (1. Asian / 2. Black or African-American / 3. Caucasian or European / 4. Hispanic or Latino / 5. Native American / 6. Native Hawaiian or Pacific Islander / 7. Two or more races / 8. Other)	2.43
Education	3.95 (4 Year College)	0.89
Income	3.00 (\$200K ~\$300K)	1.68
Spending	2.34 (\$101K ~ 200K)	1.84

Table 2. Summary of Planned and Perceived Brand Images by Brand (Factor Analysis)

Brand-specific correlation outcomes are summarized in Table 3. For Olay, the brand image dimension Mystery demonstrated significant positive correlations with both consumer attitude and purchase intention. Neutrogena exhibited a coherent pattern of strong associations across all variables, suggesting effective alignment between its perceived image and consumer behavioral outcomes. In contrast, Hera's perceived brand image, characterized by Sensuality, showed a negative relationship with both consumer attitude and purchase intention, indicating a potential disconnect between image perception and consumer preferences. Estée Lauder and L'Oréal both exhibited robust positive correlations, with brand image dimensions aligning closely with favorable consumer attitudes and stronger purchase intentions.

Brand		Olay	Neutrogena	Hera	Estée Lauder	L'Oréal
Variable		Perceived Image-Mystery	Perceived Image-Mystery	Perceived Image-Sensuality	Perceived Image-Sensuality	Perceived Image-Mystery
Consumer Attitude	Strong Opinion	.271**	.373**	-.288**	.374**	.403**
	Attitude Toward	.228**	.446**	-.309**	.429**	.457**
	Recommendation	.320**	.446**	-.404**	.442**	.500**
Purchase Intention		.330**	.511**	-.273**	.353**	.577**

† p .10 * p .05 ** p .01

Table 3. Brand-specific correlation outcomes

To ensure the validity of regression analyses, multicollinearity diagnostics were conducted. Variance inflation factor (VIF) values ranged from 1.032 to 1.457, well below the conventional threshold of 10 (Chatterjee & Price, 1991), confirming that multicollinearity was not a concern. Assumption checks for linear regression—linearity, normality, homoscedasticity, and independence of residuals—were also satisfied. Durbin-Watson statistics for all models fell within the acceptable range of 1.5 to 2.5, indicating no significant autocorrelation in the residuals.

Hypothesis Testing and Interpretation

This section presents empirical findings on the influence of package design–driven brand image on consumer attitudes and purchase intentions across major cosmetic brands. The analysis evaluates how visual consistency between package and brand strategy shapes consumer perceptions and decision-making.

Olay

For Olay, the planned brand image (Mystery) was perceived identically by the respondents and showed a positive and significant relationship with consumer attitude and purchase intention. Specifically, beta values were 0.240 ($p < 0.01$) for strong opinions, 0.185 ($p < 0.05$) for product attitude, and 0.295 ($p < 0.01$) for recommendation intention. The influence on purchase intention was $B = 0.283$ ($p < 0.01$). Additionally, consumer attitudes toward package design significantly influenced purchase intention, with beta values of 0.512, 0.536, and 0.667 (all $p < 0.01$), reflecting high impact. (See Figure 4)

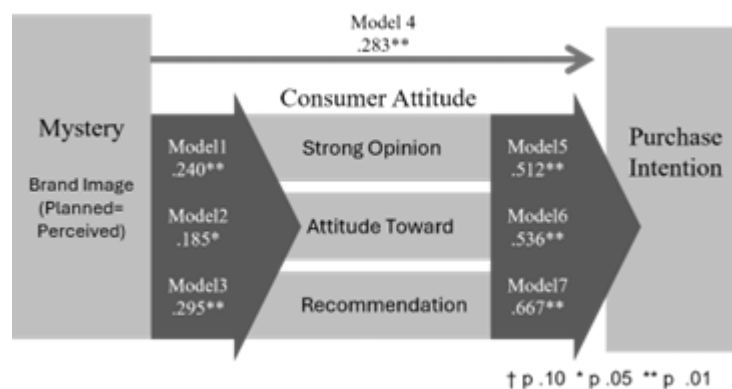


Figure 4. Olay Test Result Summary

Neutrogena

Neutrogena showed inconsistency between the planned brand image (Intimacy) and consumer perceived image (Mystery), with brand image negatively affecting consumer attitudes. Beta values for strong opinions, general attitudes, and recommendations were -0.335, -0.407, and -0.466 respectively (all $p < 0.01$). Purchase intention was also negatively impacted ($B = -0.501$, $p < 0.01$). However, consumer attitudes toward the brand still maintained a

strong positive relationship with purchase intention, with beta values of 0.568, 0.600, and 0.761 (all $p < 0.01$). This indicates that despite the negative effect of brand image, existing consumer attitudes play a decisive role in purchase intention formation. (See Figure 5)

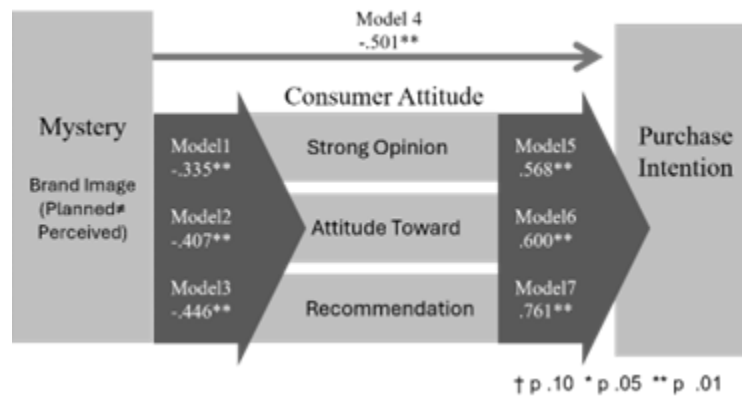


Figure 5. Neutrogena Test Result Summary

Hera

For Hera, the absence of a clear corporate brand image strategy led consumers to perceive the brand as 'sensuality.' Brand image negatively influenced consumer attitudes with beta values of -0.267 (strong opinions), -0.321 (product attitude), and -0.357 (recommendation) (all $p < 0.01$). Purchase intention was also negatively affected ($B = -0.236$, $p < 0.01$). Conversely, consumer attitudes had a positive influence on purchase intention with beta values of 0.605, 0.584, and 0.803 (all $p < 0.01$). (See Figure 6)

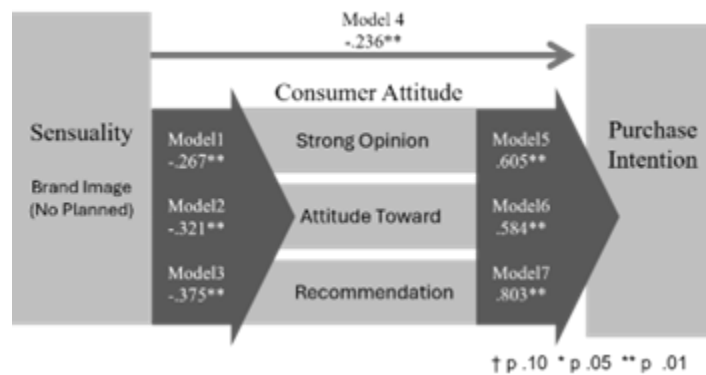


Figure 6. Hera Test Result Summary

Estée Lauder

Estée Lauder's planned brand image (Sensuality) matched consumer perception. Brand image positively influenced strong opinions ($\beta = 0.318$), general attitudes ($\beta = 0.368$), and recommendations ($\beta = 0.402$) (all $p < 0.01$). Purchase intention was significantly influenced ($B = 0.294$, $p < 0.01$). The relationship between attitude and purchase intention also showed high beta values (0.637, 0.651, 0.764; all $p < 0.01$). (See Figure 7)

Figure 7. Estée Lauder Test Result Summary

L'Oréal

L'Oréal showed alignment between the planned image (Mystery) and consumer perception. Brand image positively affected strong opinions ($\beta = 0.360$), general attitudes ($\beta = 0.424$), and recommendations ($\beta = 0.475$) (all $p < 0.01$). The impact on purchase intention was strong ($B = 0.552$, $p < 0.01$). The attitude–purchase intention relationship was also robust, with beta values of 0.599, 0.576, and 0.743 (all $p < 0.01$). (See Figure 8)

Figure 8. L'Oréal Test Result Summary

Summary

In summary, hypothesis 1 (package reflects brand strategy) were partially supported by results from Olay, Estée Lauder, and L'Oréal. Hypotheses 2 and 3 (consistency positively affects attitude and purchase intention) were fully supported. Hypothesis 4 (consumer attitude functions as a mediator) were partially supported. These findings suggest that brand image consistency is a critical factor influencing consumer responses, while consumer attitude serves as a mediating variable connecting brand image and purchase intention.

Discussion and Conclusion

This study comprehensively examined the strategic significance of cosmetic package design as a critical channel for communicating a brand's planned image, and its consequential effects on consumer attitudes and purchase intentions. The investigation aimed to clarify whether package design aligned with brand strategy has a superior influence on consumer behavior compared to visual design alone.

The empirical findings underscore that package design functions beyond aesthetics and utility; it acts as a vital interface between the brand and consumers, embodying the brand's identity and values (Bloch, 1995; Underwood, Klein, & Burke, 2001). Among the five leading cosmetic brands analyzed, Olay, Estée Lauder, and L'Oréal demonstrated a high degree of alignment between their intended brand images and the images perceived by consumers. This congruence translated into significantly positive consumer attitudes, increased likelihood of recommendation, and stronger purchase intentions. These results highlight the critical importance of strategic consistency in brand communication through package.

Conversely, the brands Neutrogena and Hera exhibited notable discrepancies between their planned brand images and consumer perceptions. Neutrogena's positioning as a scientifically specialized brand contrasted with consumer views of it as a pragmatic, value-focused brand, while Hera lacked a clear corporate brand image, with consumers perceiving it primarily through a sensual lens. These mismatches were associated with negative consumer attitudes and diminished purchase intentions, illustrating the risks brands face when their visual package messages diverge from strategic branding goals (Luffarelli, Stamatogiannakis, & Yang, 2019).

Importantly, this research advances existing marketing literature by elucidating the mediating role of consumer attitudes toward package design in the link between brand image and purchase intention. The study found that even when brand image alignment is imperfect, positive consumer attitudes toward package can partially offset negative effects and sustain purchase motivation (Underwood et al., 2001; Orth & Malkewitz, 2008). This finding suggests that package must not only reflect the brand's strategic identity but also actively foster favorable consumer feelings to effectively drive purchasing behavior.

From a theoretical perspective, the study contributes a nuanced understanding of the dynamic relationship among brand strategy, visual design, and consumer psychology. It validates the conceptual model that integrates package design as a strategic brand communication tool, expanding the scope of brand management and consumer behavior research (Keller, 2003; Bloch, 1995).

Practically, these insights carry substantial implications for branding and design professionals in the cosmetics industry and beyond. They underscore the necessity for marketers and designers to collaborate closely, ensuring package design consistently and accurately embodies the brand's strategic messaging. Such alignment enhances brand equity, strengthens consumer loyalty, and ultimately drives market performance (Nancarrow, Wright, & Brace, 1998). Furthermore, the findings advocate for ongoing consumer research to monitor perception gaps and adjust branding strategies proactively.

Looking ahead, future research could broaden the scope by investigating cross-cultural differences in brand image perception and package effectiveness, given that consumer interpretations of design elements vary across markets. Additionally, exploring the impact of innovative package technologies—including digital and interactive features—may yield valuable insights into evolving consumer engagement mechanisms. Further studies might also consider longitudinal analyses to assess how brand image consistency in package influences consumer behavior over time.

In conclusion, this study affirms that package design is a strategic asset integral to brand success. By embedding brand identity into tangible design elements, companies can enhance consumer perceptions, foster positive attitudes, and stimulate purchase intentions, thereby achieving sustained competitive advantage in the highly competitive cosmetics market (Orth & Malkewitz, 2008; Silayoi & Speece, 2007).

References

- Aaker, D. A. (1996). *Building strong brands*. Free Press.
- Aaker, D. A. (2014). *Aaker on branding: 20 principles that drive success*. Morgan James Publishing.
- Aaker, D. A., & Joachimsthaler, E. (2000). *Brand leadership: Building assets in an information economy*. Free Press.
- Ampuero, O., & Vila, N. (2006). Consumer perceptions of product packaging. *Journal of Consumer Marketing*, 23(2), 100–112.
- Balmer, J. M. T., & Greyser, S. A. (2006). Corporate marketing: Integrating corporate identity, corporate branding, corporate communications, corporate image and corporate reputation. *European Journal of Marketing*, 40(7/8), 730–741.
- Belk, R. W. (1988). Possessions and the extended self. *Journal of Consumer Research*, 15(2), 139–168.
- Bloch, P. H. (1995). Seeking the ideal form: Product design and consumer response. *Journal of Marketing*, 59(3), 16–29.
- Chatterjee, S., & Price, B. (1991). *Regression analysis by example* (2nd ed.). John Wiley & Sons.
- Cho, E. (2011). *Development of a brand image scale and the impact of lovemarks on brand equity* (Doctoral dissertation, Kansas State University).
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford University Press.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Addison-Wesley.
- Ishikawa, T. (2013). Understanding consumer decision-making processes using demographic variables in global markets. *International Journal of Market Research*, 55(4), 567–587.
- Japutra, A., & Molinillo, S. (2019). Responsible and ethical brand management: The role of brand equity, brand authenticity, and brand personality. *Sustainability*, 11(21), 6042.
- Kapferer, J. N. (1992). *Strategic brand management: New approaches to creating and evaluating brand equity*. Free Press.
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1–22.
- Keller, K. L. (2003). *Strategic brand management: Building, measuring, and managing brand equity* (2nd ed.). Prentice Hall.

- Keller, K. L. (2008). *Strategic brand management* (3rd ed.). Pearson Education.
- Keller, K. L. (2013). *Strategic brand management* (4th ed.). Pearson.
- Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson Education.
- Luffarelli, J., Stamatogiannakis, A., & Yang, H. (2019). The visual size of brands. *Journal of Marketing*, 83(5), 91–108.
- Magnier, L., & Schoormans, J. (2015). Consumer reactions to sustainable packaging: The interplay of visual appearance, verbal claim and environmental concern. *Journal of Environmental Psychology*, 44, 53–62.
- Meyers, H. M., & Gerstman, R. (2005). *The branding of packaged goods*. BusinessWeek Books.
- Nancarrow, C., Wright, L. T., & Brace, I. (1998). Gaining competitive advantage from packaging and labelling in marketing communications. *British Food Journal*, 100(2), 110–118.
- Orth, U. R., & Malkewitz, K. (2008). Holistic package design and consumer brand impressions. *Journal of Marketing*, 72(3), 64–81.
- Roberts, K. (2004). *Lovemarks: The future beyond brands*. PowerHouse Books.
- Roberts, K. (2005). *Lovemarks: The future beyond brands* (Expanded ed.). PowerHouse Books.
- Roberts, K. (2006). *The Lovemarks effect: Winning in the consumer revolution*. PowerHouse Books.
- Schiffman, L. G., & Kanuk, L. L. (2009). *Consumer behavior* (10th ed.). Pearson Prentice Hall.
- Schiffman, L. G., & Wisenblit, J. (2015). *Consumer behavior* (11th ed.). Pearson Education.
- Schmitt, B. H., & Simonson, A. (1997). *Marketing aesthetics: The strategic management of brands, identity, and image*. Free Press.
- Shao, W., Baker, J. A., & Wagner, J. A. (2011). The effects of appropriateness of service contact personnel dress on customer expectations of service quality and purchase intention. *Journal of Business Research*, 64(7), 757–763.
- Shao, W., Baker, J., & Wagner, J. A. (2013). The effects of appropriateness of service contact personnel dress on customer expectations of service quality and purchase intention: The moderating influences of involvement and gender. *Journal of Business Research*, 67(6), 1160–1166.
- Silayoi, P., & Speece, M. (2007). The importance of packaging attributes: A conjoint analysis approach. *European Journal of Marketing*, 41(11/12), 1495–1517.
- Solomon, M. R., Marshall, G. W., & Stuart, E. W. (2015). *Marketing: Real people, real choices* (8th ed.). Pearson Education.
- Underwood, R. L. (2003). The communicative power of product packaging: Creating brand identity via lived and mediated experience. *Journal of Marketing Theory and Practice*, 11(1), 62–76.
- Underwood, R. L., & Klein, N. M. (2002). Packaging as brand communication: Effects of product pictures on consumer responses to the package and brand. *Journal of Marketing Theory and Practice*, 10(4), 58–68.
- Underwood, R. L., Klein, N. M., & Burke, R. R. (2001). Packaging communication: Attentional effects of product imagery. *Journal of Product & Brand Management*, 10(7), 403–422.

Young, S. (2004). Breaking through the clutter: Communication strategies for packaging. *Packaging Research Digest*, 12(2), 1–8.

Summary Brief

Brand Fanaticism: The Dark Side of Brand Religiosity

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While brand religiosity can generate considerable value for a brand and brand community, it is imperative to cultivate a healthy form of religiosity that does not escalate into brand fanaticism. When brand religiosity crosses the threshold into fanaticism, it can ultimately damage the brand. Imagine you are examining a brand community from the outside looking in, and you perceive the behavioral norms and acts of the members to be extreme, so much so that you are repelled. We propose that such actions can lead to perceptions of brand fanaticism in the eyes of individuals who are considered outsiders of the brand community, ultimately resulting in brand avoidance and dislike of the brand community.

Introduction

Religiosity largely has a positive connotation, especially when it comes to branding. However, a dark side can emerge: brand fanaticism. While brand religiosity is an intensified devotion where the brand's centrality in a consumer's life mirrors that of religion (e.g., Stephens 2019), brand fanaticism is the extreme imposition of a brand on others (Kucukan, 2005). The transition from what was once a positive response to a negative response has been a trend within marketing. For example, severed brand relationships can turn brand attachment into anti-brand actions (Japutra et al., 2014). It is imperative to understand not only how brand religiosity could evolve into a dark side but also the negative ramifications that stem from such an evolution.

Background

Brand religiosity, once a certain level of extremity is reached, could lead to perceptions of brand fanaticism. Brand fanaticism is an impression, typically from the outside looking in, which occurs when an outgroup member (e.g., external consumer) evaluates an ingroup (brand community member). Consumers who are exposed to and come in contact with passionate and devoted brand community members can develop perceptions of brand fanaticism. The actions of brand community members could be considered extreme, overbearing, and fanatical to other consumers. Specifically, the actions commonly observed among brand community members include brand evangelism, brand defense, sacralization of a brand's products, and enlightenment.

Brand evangelism is defined as actively and fervently spreading positive information about a brand with the intention to share the experience with others by convincing them to try it (Matzler et al., 2007). Brand defense is the act of shielding the brand from negative associations. It occurs when consumers attempt to protect their favorite brands (Javed et al., 2015). Sacralization is the process of transforming a brand's product that was once considered mundane into one that becomes sacred (Belk et al., 1989). Enlightenment refers to insight, revelation, or (as is the case for the current study) knowledge (Wilk et al., 2020). The possibility of crossing the line of brand religiosity to brand fanaticism by partaking in these acts is fairly easy due to the underlying fervency they share and the inherent subjectivity of brand fanaticism. Gardner (1997) highlights the subjectivity through the following quote: "One man's religion is another man's fanaticism" (p. 131). Once perceptions of brand fanaticism occur, there are consequences for the brand and the brand community. Specifically, outgroup members are likely to engage in brand avoidance as well as dislike of the brand community, because they do not want to be associated with such extreme behaviors.

Key Findings

A survey was created and administered via Prolific. The ingroup of the study is Disney adults, and it was ensured that the respondents (consumers in the outgroup) were not involved in Disney's brand community. Additionally, respondents were 18 years or older and considered English their primary language. They were monetarily compensated. A total of 431 responses were used after cleaning the data and accounting for attrition. The average age was 38 and 40% were male. Participants answered questions about avid Disney fans with adapted brand

evangelism, brand defense, sacralization of the brand's products, and enlightenment scales. Brand fanaticism, brand avoidance, and dislike of brand community scales were also used and adapted for the purposes of the current study.

A confirmatory factor analysis was performed to assess the unidimensionality of the measurement items. Construct reliabilities were measured for the construct as well. The model fit indices suggest that the measurement model was a good fit ($\chi^2 = 856.74$, $df = 384$, Comparative Fit Index [CFI] = .96, Tucker Lewis Index [TLI] = .95, Root Mean Square Error of Approximation [RMSEA] = .05). The convergent and discriminant validity of the measures were assessed by calculating the average variance extracted and comparing it to the shared variance between constructs. Each construct had an average variance extracted above .55, providing support of convergent validity. The shared variance between constructs did not exceed the average variance extracted, providing support for discriminant validity of the items.

We utilized structural equation modeling, and the structural relationships for the model were analyzed using AMOS 28. The results found that the model fit the data well ($\chi^2 = 1091.17$, $df = 394$, $p < .001$; CFI = .94, IFI = .94, RMSEA = .06). Brand evangelism (standard estimates = .206, t -value = 3.32), brand defense (standard estimates = .185, t -value = 2.74), sacralization of the brand's products (standard estimates = .319, t -value = 4.63), and enlightenment (standard estimates = .173, t -value = 2.73) had a significant, positive relationship with perceptions of brand fanaticism. Perceptions of brand fanaticism (SMC = .595) had a significant, positive relationship with brand avoidance (standard estimates = .556, t -value = 10.97, SMC = .309) and dislike of the brand community (standard estimates = .485, t -value = 9.52, SMC = .235).

The study shows that extreme brand evangelism, brand defense, sacralization, and enlightenment displayed by ingroup members cause external consumers to develop perceptions of brand fanaticism. Outgroup members consider such behavior to be fanatical, leading to negative outcomes from the perspective of the brand and brand community: brand avoidance and dislike of the brand community. This poses a problem not only for the brand but also for the brand community, because outsiders who want to avoid the brand and dislike the brand community mitigate sales for the brand and growth of the community. Brand community members will fight an uphill battle when engaging in evangelistic tendencies directed at outsiders who perceive fanaticism. These findings offer valuable insight for brand managers.

This study shows that the dark side of brand religiosity is brand fanaticism. Brand managers need to be aware that there is a fine line between positive benefits gained from brand religiosity within community and negative perceptions that form if extremism is present in the religious tendencies and actions. Future research should focus on how to properly manage the balance of encouraging evangelistic, defensive, sacred, and enlightened behaviors and experiences without igniting perceptions of fanatical behavior by outsiders.

References

- Belk, R. W., Wallendorf, M., & Sherry, J. F. (1989). The Sacred and the Profane in Consumer Behavior: Theodicy on the Odyssey. *Journal of Consumer Research*, 16, 1–38.
- Gardner, J. (1997). *The Age of Extremism: The Enemies of Compromise in American Politics, Culture, and Race Relations*. New Jersey, NJ: Carol Publishing Group.
- Japutra, A., Ekinci, Y., Simkin, L., & Nguyen, B. (2014). The dark side of brand attachment: A conceptual framework of brand attachment's detrimental outcomes. *The Marketing Review*, 14(3), 245–264.
- Javed, M., Roy, S., & Mansoor, B. (2015). Will you Defend your Loved Brand? In M. Fetscherin & T. Hellmann (Eds.), *Consumer Brand Relationships: Meaning, Measuring, Managing* (pp. 31–54). Springer Link.
- Matzler, K., Pichler, E. A., & Hemetsberger, A. (2007). Who is spreading the word? The positive influence of extraversion on consumer passion and brand evangelism (Vol. 35, p. 111).
- Milgram, S. (1977). The social meaning of fanaticism. *ETC: A Review of General Semantics*, 34(1), 58–61.
- Stephens, D. (2019). In brands we trust: Why companies are the new communities. Retrieved from <https://www.businessoffashion.com/opinions/retail/in-brands-we-trust-why-companies-are-the-new->

communities

Wilk, V., Soutar, G. N., & Harrigan, P. (2020). Online brand advocacy (OBA): The development of a multiple item scale. *Journal of Product & Brand Management*, 29(4), 415–429.

SESSION 23.8: COGNITIVE NOISE, PRICING POISE, AND THE PULL OF PRINCIPLE

Moderators:

Matthias Herrmann

Summary Brief

Breaking Barriers: How Ad Framing Encourages Acceptance of AI in Mental Health Care

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Mental health issues affect 23.1% of U.S. adults, yet only 47.2% receive treatment, creating an urgent need for accessible alternatives like AI therapy. While AI therapy shows promise, effective marketing strategies for user adoption remain underdeveloped. This study examines how emotional and regulatory appeals interact when introducing AI avatars for mental health support. Drawing on dual-processing theory, individuals process advertisements through affective pathways (emotions via storytelling and AI facial expressions) and cognitive pathways (rational evaluation of prevention versus promotion messages). Limited research explores how content type (storytelling vs. factual) and emotional expression (happy vs. sad) combine with regulatory orientations to influence the adoption of AI mental health technology. Three experiments were conducted. Study 1 compares happy versus sad appeals using Regulatory Focus Theory; Study 2 contrasts prevention versus promotion framings on AI therapy usage intention; Study 3 examines behavioral intention through self-efficacy mediation. The research extends health communication theory to AI-driven mental health tools. It provides practical guidance for developers and organizations to design AI avatar introductions that enhance user trust, emotional connection, and engagement, improving mental health support access.

Introduction

Mental health issues affect 23.1% of U.S. adults, yet only 47.2% receive treatment (NIMH, 2022), creating urgent need for accessible AI therapy alternatives. This study addresses the critical gap in understanding how emotional and regulatory appeals interact when introducing AI avatars for mental health support. While regulatory focus theory suggests individuals respond differently to motivational framings, limited research explores how content type (storytelling vs. factual) and emotional expression (happy vs. sad) combine with regulatory orientations to influence trust, engagement, and adoption of AI mental health tools.

Three experiments examine different processing pathways (cognitive versus affective). Study 1 applies Regulatory Focus Theory, comparing happy versus sad message appeals. Study 2 contrasts prevention versus promotion framings on AI therapy usage intention. Study 3 examines how message framings influence behavioral intention through the mediation of self-efficacy. This research contributes to the field by extending insights into health communication and technology adoption to AI-driven mental health tools, providing design guidance for developers and mental health organizations to create AI avatar introductions that enhance user trust, emotional connection, and engagement with mental health support systems.

Background

This research applies Regulatory Focus Theory to understand how AI communication strategies influence user adoption intentions. The study examines the intersection of emotional framing and motivational messaging in AI contexts, building on established marketing psychology principles. As AI interactions become increasingly human-like, the psychological significance of message framing becomes crucial for effective communication and user engagement.

The theoretical foundation rests on three key components. Regulatory Focus Theory (Crowe & Higgins, 1997) distinguishes between promotion-focused individuals who seek growth and opportunities versus prevention-focused individuals who prioritize security and risk avoidance (Lee et al., 2021). Self-efficacy theory (Bandura, 1982) explains how individuals' beliefs in their capabilities influence behavioral intentions, often serving as a mediating factor between external messaging and actual behavior. Emotional appeals (Odunfa, 2023) research demonstrates that happy expressions foster trust and engagement in AI interactions, while sad appeals can create a connection but risk being perceived as manipulative if overused (Lee et al., 2021). Our study builds on this theoretical foundation by applying regulatory focus theory to the emerging context of AI communication. Specifically, how emotionally framed AI messages (happy vs. sad faces and promotion vs. prevention ads) influence

user intention and perception. As AI becomes more human-like in its interactions, the framing of its messages takes on psychological significance (Araujo & Bol, 2024). Given that AI interactions often lack traditional human cues, understanding how emotion intersects with user motivation is essential. RFT is particularly suitable because it accounts for affective and motivational processes that may drive user engagement with AI. By aligning the message (happy vs. sad) with users' regulatory orientation (promotion vs. prevention), we aim to assess whether emotional congruence enhances user intention to trust or adopt AI, offering valuable insight into designing advertising of AI.

Theoretical Framework and Hypothesis Development

The study proposes three specific hypotheses to test these relationships. First, positive emotional advertisements combined with story-based appeals are expected to directly increase consumers' intention to use AI therapy services. Second, prevention-focused message framing is hypothesized to have a stronger impact on AI therapy adoption intention compared to promotion-focused framing, reflecting users' natural caution toward new technologies. Third, self-efficacy is proposed as a mediating variable that explains how preventative message framing translates into actual usage intentions.

Method

Three sequential studies were conducted to examine the interplay between emotions (Study 1), message framing (Study 2) and testing self-efficacy as a mediator (Study 3). Study 1 aimed to determine the moderating effect of emotions on message framing by exploring how various emotional states influence the effectiveness of preventive versus promotional messages. Based on the results of Study 1, Study 2 employed the identified appropriate emotional state (happiness) as a stimulus and paired it with preventive and promotional message framings to further examine their combined impact. Finally, building on the outcomes of Study 2, Study 3 utilized the preferred emotion (happiness) and message framing to investigate the mediating role of self-efficacy in the observed effects. Together, these studies provide a comprehensive analysis of how emotional stimuli and message framing interact to influence behavioral and psychological outcomes.

Key Findings

The study found that prevention-focused messages significantly outperformed promotion-focused messages in generating positive attitudes toward AI therapy ($M=5.27$ vs $M=4.71$) and stronger usage intentions ($M=3.97$ vs $M=3.35$). This suggests consumers prioritize risk reduction, safety, and protection from negative outcomes when considering AI therapy, reflecting heightened vulnerability and risk perception in mental healthcare decisions. Emotional responses played a significant role in shaping attitudes, with "Happy Story" conditions eliciting the most positive attitudes ($M = 4.46$) and the strongest usage intentions ($M = 4.14$) compared to "Sad Story" conditions. Narrative-based approaches consistently outperformed fact-based approaches across all emotional conditions, aligning with narrative transportation theory by reducing counterarguing and increasing emotional engagement.

The study revealed important mediation effects: prevention-focused messaging significantly enhanced self-efficacy ($\beta = .62, p < .001$), which in turn strongly predicted usage intention ($\beta = .61, p < .001$). Self-efficacy acted as a partial mediator between message framing and behavioral intention ($\beta = .29, p < .001$), indicating that message effectiveness depends on successfully instilling consumer confidence. These findings suggest that optimal AI therapy marketing should combine prevention-focused framing with positive emotional tone and narrative formats, emphasizing safety and security rather than risks and problems while using stories to help consumers envision themselves using the technology.

References

- Bandura, A. (1977). Self-efficacy: toward a Unifying Theory of Behavioral Change. *Psychological Review*, 84(2), 191–215. <https://doi.org/10.1037/0033-295X.84.2.191>
- Crowe, E., & Higgins, E. T. (1997). Regulatory focus and strategic inclinations: Promotion and prevention in decision-making. *Organizational behavior and human decision processes*, 69(2), 117-132.
- Lee, K., Shim, E., Kim, J., & Nam, H. (2021). The influence of product innovation messages on the intention to Purchase incumbent products. *Journal of Innovation & Knowledge*. <https://doi.org/10.1016/j.jik.2021.01.003>

National Institute of Mental Health (NIMH) (2022). *Mental Illness*. Retrieved from

<https://www.nimh.nih.gov/health/statistics/mental-illness>

Odunfa, E. O. (2023). The Power of Emotion in Health Campaign Messages: Investigating the Effects of Fear and Hope Appeals to College Students (Order No. 30813552). Available from ProQuest Dissertations & Theses Global. (2901409922).

Summary Brief

The Influence of Perceptually Disfluent Fonts to Display Time-limited Promotional Information on Retailer Visit Intentions

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Researchers have demonstrated that consumers process information presented in a disfluent font at a greater depth than when presented in a fluent font. In this research, we demonstrate that presenting transience information about a time-limited promotion in a disfluent font increases participants' intentions to visit the retailer during the promotion. Across two studies, we establish the disfluent font effect and demonstrate that perceived promotion length mediates the effect but only among consumers with a favorable attitude toward the retailer.

Introduction

Time-limited promotions are important tools for retailers to drive store traffic and encourage purchases (Ailawadi et al., 2009; Ferris, 2007). While researchers have identified a number of methods to increase the effectiveness of promotions, firms continue to expect more effective promotions (Van Heerde et al., 2013). In the present research, we attempt to address the managerial need to increase promotion effectiveness by demonstrating how using a disfluent font to present transience information can increase consumers' retailer visit intentions during a time-limited promotion. In this research we make theoretical and substantive contributions to the literature by establishing the effect of disfluent fonts on consumers' intentions toward time-limited promotions, uncovering the underlying psychological process, and identifying a boundary condition.

Impact of Font Disfluency on Consumer Perceptions

Prior research has demonstrated that consumers process disfluent stimuli differently than fluent stimuli. Disfluent stimuli are novel and unique, and when consumers encounter disfluent, unfamiliar stimuli in unexpected situations, they spend more time processing the disfluent stimuli (Coulter & Roggeveen, 2014) and likely process at greater depth (Mead & Hardesty, 2018). Researchers have demonstrated that fonts can be manipulated to be relatively less (disfluent) or more (fluent) familiar to consumers and that disfluent fonts in advertisements can capture consumer attention, evoke interest, and increase salience of the disfluent text at the time of purchase, leading to increased purchase intentions (Motyka et al., 2016). These lines of research suggest that the increased processing of disfluent text affects how the text is initially perceived and encoded in memory and how it is recalled and used at a time of action or purchase.

We propose that when information about the transience of a time-limited promotion is presented in a disfluent font, the increased processing depth of the underlying text will lead consumers to perceive the event as more transient and shorter in duration. As a result, consumers will increase their retailer visit intentions so they do not miss the promotion. However, we do not expect consumers with negative attitudes toward the retailer to feel compelled to visit the retailer (Korgaonkar et al., 1985). Therefore, we expect that disfluent fonts will only increase retailer visit intentions among consumers who have a relatively positive attitude toward the retailer. Together we predict:

H1: In an advertisement, time-limited promotional information presented in a disfluent font increases consumers' retailer visit intentions relative to time-limited promotional information presented in a fluent font.

H2: Perceived promotion length mediates the effect of a disfluent font on consumers' intentions.

H3: The mediation effect will be attenuated among consumers with a less favorable attitude toward the retailer.

Study 1

One hundred and three undergraduate students completed a lab survey to satisfy a research requirement. Students were asked to view an advertisement for Best Buy which promoted an “84 Hour Sale”. In a between-subjects design, the advertisement font was shown in either the Arial font or the Curlz MT font, which had been tested to be disfluent in prior research (Mead & Hardesty, 2018). The advertisements were otherwise identical (see Fig. 1). After viewing the advertisement, participants reported the likelihood they would visit the retailer’s website soon via a 3-item, 7-point scale (how likely are you to visit the Best Buy website soon, how likely are you to visit the Best Buy website the first chance you get, how likely are you to visit the Best Buy website in the next three days; $\alpha = .95$, 1 = not likely at all, 7 = very likely).

Supporting H1, an independent samples t-test confirmed that participants in the disfluent font condition reported significantly higher website visit intentions than participants in the fluent font condition ($t(101) = 2.08$, $p = .040$, Cohen’s $D = .41$; $M_{\text{Disfluent}} = 3.28$, $SD = 1.87$ vs. $M_{\text{Fluent}} = 2.53$, $SD = 1.78$).

Study 2

In study 2, we investigate if promotions advertised via disfluent fonts are perceived to be shorter in duration, whether perceived promotion length mediates the effect on visit intentions, and whether attitude toward the retailer moderates the proposed mediation effect. To increase generalizability, we selected a new focal retailer, the restaurant Olive Garden, a recognizable brand well-known its focused menu of Italian foods. Moreover, restaurant and food preferences tend to be highly subjective.

Ninety-two students completed an online survey to satisfy a research requirement. In a between-subjects design, participants viewed an advertisement for Olive Garden gift cards. Font fluency was manipulated with two new fonts: Broadway (fluent) and Endeavour Italic (disfluent; see Fig. 2). The advertisements were otherwise identical. After viewing the advertisement, participants rated their intentions to visit the retailer soon via a 3-item, 7-point scale (how likely are you to visit Olive Garden soon, how likely are you to visit Olive Garden the first chance you get, how likely are you to visit Olive Garden in the next three days; 1 = not likely at all, 7 = very likely; $\alpha = .86$). Next, participants provided an assessment of perceived promotion length via a 2-item, 7-point scale (it feels like this sale is very transient, it feels like this sale will not last very long; $\alpha = .74$, $r = .60$). Finally, participants rated their attitude toward Olive Garden with a 7-point semantic differential measure (dislike a lot/like a lot).

An independent samples t-test confirmed that participants in the disfluent font condition believed that the length of the promotion would be shorter than participants in the fluent font condition ($t(90) = 2.82$, $p = .006$, Cohen’s $D = .59$; $M_{\text{Disfluent}} = 4.51$, $SD = 1.26$ vs. $M_{\text{Fluent}} = 3.75$, $SD = 1.33$). A second independent samples t-test was conducted to determine if participants in the disfluent font condition reported an increased likelihood to visit Olive Garden soon. The results were not significant ($t(90) = 1.09$, $p = .28$, Cohen’s $D = .23$; $M_{\text{Disfluent}} = 2.42$, $SD = 1.44$ vs. $M_{\text{Fluent}} = 2.12$, $SD = 1.89$). However, given that restaurant visit intentions tend to be influenced by one’s attitude toward the restaurant, we conducted a follow-up analysis.

We used the Process macro (Hayes, 2022) to run a moderated mediation analysis (model 14) with retailer visit intentions as the dependent variable, participants’ font condition as the independent variable, perceived promotion length as the mediator, and participants’ attitude toward Olive Garden as a moderator of the relationship between perceived promotion length and retailer visit intentions. Overall, the 95% confidence interval index of moderated mediation excluded zero (.07; .005 to .16), indicating that the entire moderated mediation model was significant. Specifically, participants in the disfluent font condition perceived the promotion as shorter ($\beta = .76$, $t(90) = 2.82$, $p = .006$). Further, perceived promotion length influenced retailer visit intentions, but only among participants’ who reported high levels of favorability toward Olive Garden ($\beta_{\text{Promotion Length} \times \text{Attitude}} = .09$, $t(87) = 2.28$, $p = .025$), indicating moderated mediation (conditional indirect effects: +1 SD attitude: .24; .02 to .56; -1 SD attitude: -.02; -.26 to .22). The 95% confidence interval of the direct effect included zero (-.38 to .59), indicating full mediation. These results provide support for H2 and H3.

Figure 1: Study 1 Experimental Stimuli



Figure 2: Study 2 Experimental Stimuli



References

- Ailawadi, Kusum L., Beauchamp, J. P., Donthu, Naveen, Gauri, Dinesh K., & Shankar, Venkatesh. (2009). Communication and Promotion Decisions in Retailing: A Review and Directions for Future Research. *Journal of Retailing*, 85(1), 42-55.
- Coulter, Keith S., & Roggeveen, Anne L. (2014). Price Number Relationships and Deal Processing Fluency: The Effects of Approximation Sequences and Number Multiples. *Journal of Marketing Research*, 51(1), 69-82.
- Ferris, Mark. (2007). Insights on Mobile Advertising, Promotion, and Research. *Journal of Advertising Research*, 47(1), 28-37.
- Hayes, Andrew F. (2022). Introduction to Mediation, Moderation, and Conditional Process: A Regression-Based Approach (3rd ed.). The Guilford Press.
- Korgaonkar, Pradeep K., Lund, Daulat, & Price, Barbara. (1985). A Structural-Equations Approach Toward Examination of Store Attitude and Store Patronage Behavior. *Journal of Retailing*, 61(2), 39.
- Mead, James A., & Hardesty, David M. (2018). Price Font Disfluency: Anchoring Effects on Future Price Expectations. *Journal of Retailing*, 94(1), 102-112.
- Motyka, Scott, Suri, Rajneesh, Grewal, Dhruv, & Kohli, Chiranjeev. (2016). Disfluent vs. fluent price offers: paradoxical role of processing disfluency. *Journal of the Academy of Marketing Science*, 44(5), 627-638.
- Van Heerde, Harald J., Gijsenberg, Maarten J., Dekimpe, Marnik G., & Steenkamp, Jan-Benedict E. M. (2013). Price and advertising effectiveness over the business cycle. *Journal of Marketing Research*, 50(2), 177-193.

**SESSION 23.9: INNOVATION IN TEACHING
COMPETITION—SESSION I**

Moderators:

Larry Neale

Innovations in Teaching Competition

Using AI to Reach More Students: Engaging Students Through Music and Podcasts

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Teaching college students has always been a rewarding challenge. Between the variety of personalities, shorter attention spans, and the constant pace of technology, reaching students today requires more than just solid lectures and a textbook. Over the years, I've had students come to me looking for better ways to study. Some were doing well with certain topics but couldn't grasp others, even though they were using the same study strategies. For example, one student might do great memorizing definitions with flashcards but struggle to understand frameworks from the slides. It became clear that students don't just learn differently from each other, the same student might need different methods depending on the content (Fleming & Mills, 1992; Mayer, 2009).

Some students prefer reading, others learn better through visuals or by listening. Some need to write things out, while others talk it through. There's research showing that when students experience content in more than one way, it helps them understand and remember it better (Mayer, 2009; Laverie, 2006). That convinced me that my job isn't just to teach the content, it's to help students absorb and use it. To do that, I need to offer more than one path to get there.

My Own Experience and Epiphany

This all made me think back to when I was studying for the bar exam. Torts gave me a hard time. I was making and reading outlines, doing practice tests, and making charts, but nothing was helping. I started thinking about what I could do differently.

Back when I worked as a DJ, I saw how people could sing every word of a song they hadn't heard in years, even if they forgot what someone told them yesterday. There's something powerful about music and memory. And there's science behind it too (Racette & Peretz, 2007). So, I took my torts notes, had a program to turn the text into speech, and laid that audio over a karaoke track. I burned it on a CD and listened to it while I drove. The repetition and rhythm worked. For the first time, I was retaining the material, and it didn't feel like studying.

That idea stuck with me. When tools like ChatGPT, Suno, and Notebook LM became available, I realized I could bring that same experience to my students. These tools gave me a way to support different learning styles without changing my content. I could help students absorb key ideas in ways that made sense for them.

Putting the Pieces Together

Once I realized what these tools could do, I started combining what I knew with what they offered. I used ChatGPT to summarize my lecture notes. I then asked it to turn those summaries into lyrics, using the tone and genre I thought students would enjoy. I used Suno to generate full songs based on those lyrics and posted the songs on Canvas or YouTube. That way, students could listen whenever and wherever it worked for them.

At the same time, I started using Notebook LM. I uploaded lecture notes, PDFs, and web links to create searchable, interactive notebooks. Then, I used Notebook LM to create a podcast-style summary. I also showed them how to use these tools for other classes, internships, or even professional development. It gave them more ways to connect with the material, and it helped them take ownership of their learning.

Description of the Innovation and Implementation

This approach is simple to execute but has had a big impact on how students engage with the material. I use artificial intelligence tools to turn my marketing course content into songs and podcast-style audio. The goal is to give students another way to absorb information, especially if traditional studying methods haven't worked well for them in the past.

Here's how I do it. I begin by identifying the key points from a lecture. This might come directly from my slides or the text. I even have ChatGPT to summarize my slides. Once I have the main ideas laid out, I prompt

ChatGPT to turn that content into song lyrics. I usually specify the musical genre and the tone I want, like asking it to “write a catchy rap about the 4 Ps of marketing for undergraduate students.” I prompt it to make sure it repeats the most important terms to help with retention.

After the lyrics are ready, I paste them into Suno. This tool creates a full song, complete with vocals and background music. Here, I also specify the genre and any other characteristics I feel the song needs. I download the finished track and post it to Canvas or YouTube. Sometimes, I will play the track in class to liven up lectures. Students can listen to it on their schedule. Most of them download the files straight to their phones so they can replay them as needed.

I also create podcast-style summaries using Notebook LM. I upload class notes, slides, or other resources. Notebook LM turns that content into an interactive digital notebook and generates clear, easy-to-follow audio summaries. Even better, students can ask questions while listening, and the AI will respond based on the material I’ve uploaded. It’s like giving each student a personalized tutor. Even more, students can search these notebooks to help study or with assignments.

The tools are free and easy to use, and the whole process takes less time the more you do it. It does not require any technical background. You just need to be comfortable summarizing material and typing prompts. Once you’ve made a few songs or podcast summaries, you’ll have reusable resources for future semesters. Most importantly, your students will walk away with more than just knowledge; they’ll leave with a toolset they can use well beyond the classroom.

Discussion of Use and Student Impact

I’ve used this approach in several of my marketing classes, and the results have been better than I expected. At first, a few students were skeptical. They didn’t know what to make of hearing a song about segmentation or having a podcast read their notes aloud. That changed quickly once they realized how useful it could be. One student told me she finally understood and remembered the STP process after listening to the song version a few times. Another said the podcast summaries helped him stay on top of the material while balancing a full-time job. For many, it turned studying from something passive into something they could enjoy and stick with.

What stood out to me, though, was how many students started using the tools beyond my class. Some created songs for biology or history, while others used Notebook LM to prepare for interviews or organize class notes. I wasn’t just seeing students study better, I was seeing them become more resourceful. They were building habits that would serve them long after our course ended.

It also changed the way I connect with students. They began opening up about how they study and what works for them. I had more one-on-one conversations about learning strategies than I’ve had in all my previous years of teaching combined. These tools created a natural entry point for deeper conversations about learning, motivation, and how to manage time and stress.

I’ve seen students become more confident and more engaged in the process. One of them wrote in a reflection, “I never thought I’d be singing about marketing, but I couldn’t get the lyrics out of my head, which was kind of annoying at times, lol.” Another shared that she listened to the podcast summaries while helping care for her grandmother and felt like, for the first time, she wasn’t falling behind. These weren’t isolated comments. They were part of a pattern.

Even more encouraging is the increasing number of students who are now experimenting with AI tools independently. They’re not waiting for someone to tell them what to do. They’re using what they’ve learned and applying it in ways I didn’t even expect. If they can take these same tools and use them in another class, during an internship, or even in their personal lives, then I know I’ve given them something valuable. This isn’t just about passing a test. It’s about helping them develop skills that continue to work for them long after the semester is over.

Conclusion

This innovation has transformed my teaching by creating new ways to connect with students. It reinforces the importance of meeting my students where they are and using creative tools to make learning fun and memorable. Other instructors can adapt this method to their own courses and see similar benefits. I look forward to continuing to explore how AI and creativity can work together to make education more effective and enjoyable.

References

- Fleming, N. D., & Mills, C. (1992). Not another inventory, rather a catalyst for reflection. *To Improve the Academy*, 11(1), 137–155.
- Laverie, D. A. (2006). In-class active cooperative learning: A way to build knowledge and skills in marketing courses. *Marketing Education Review*, 16(2), 59–76.
- Mayer, R. E. (2009). *Multimedia learning* (2nd ed.). Cambridge University Press.
- Racette, A., & Peretz, I. (2007). Learning lyrics: To sing or not to sing? *Memory & Cognition*, 35(2), 242–253.

MEET THE EDITORS—SESSION I

Moderators:

Annie Cui

Christopher Hopkins

Anjala Krishen

Maria Petrescu

Brian Rutherford

Kevin Shanahan

Ray Taylor

SESSION 24.2: INSIDE SALES IN THE ALGORITHM AGE

Moderators:

Stefan Sleep

Summary Brief

“A Match Made in Sales Heaven”: Exploring the Relationship Between Digital Integration, Value-Based Selling, Micromanagement, and Technological Turbulence

Ashish Kalra, University of Dayton

Omar S. Itani, Lebanese American University

Sales organizations are increasingly adopting digital technologies while simultaneously implementing value-based selling. This study investigates the relationship between the adoption of digital tools and the implementation of VBS practices. Results show a strong positive relationship, with digital tools boosting salespeople's ability to provide personalized, value-driven solutions. Adopting the Technology-Organization-Environment (TOE) framework, we also test the role of critical managerial and environmental influences. Specifically, we demonstrate that micromanagement, a key component of organizational managerial influence, and technological turbulence, which represents the contemporary reality of the industry, play a crucial role in maximizing the benefits from digital tools. Our study shows that while micromanagement helps reap the benefits of digital tools as they maximize value-based selling, micromanagement can become an impediment in cases of highly technologically turbulent markets.

Introduction

Business-to-business (B2B) sales exchanges have undergone significant changes in recent years. Sales organizations have invested in digital technologies to create value for their buyers (Alavi & Habel, 2021; Badrinarayanan et al., 2025; Mattila et al., 2021) and gain a competitive advantage in the industry. Past research studies have shown that utilizing digital technologies (such as social media, CRM, and social CRM, among others) leads to positive outcomes for sales organizations (e.g., Itani et al., 2022; Kalra et al., 2023; Micallef et al., 2024). Meanwhile, B2B salespeople are encouraged to improve their sales approach by adopting value-based selling (e.g., Alamäki & Korpela, 2021; Keränen et al., 2023; Liu et al., 2023).

Despite these significant research findings, the connection between these digital technologies and value-based outcomes remains unknown. Salesperson digital integration refers to the extent to which salespeople utilize technologies to perform and support their tasks (Guenzi & Nijssen, 2021). Value-based selling is defined as “understanding a customer's business, crafting tailored value propositions, and communicating this value effectively to the customer to achieve mutually beneficial outcomes” (Terho et al., 2012, p. 175).

Understanding how digital integration affects value-based selling is crucial, as it bridges technological adoption with customer-centric strategies, ensuring sustained competitive advantage and superior buyer experiences. We also explore the boundary conditions of the relationship. Specifically, relying on the notion that managerial and industry characteristics affect salespeople's job outcomes, we explore the moderating role of micromanagement—defined as “managerial intervention characterized by close control and involvement in day-to-day tasks” (Kumar et al., 2025, p. 1), and technological turbulence—concerned with the magnitude of change in the technology in the market (Crick et al., 2024). In defining the effect of digital integration on value-based selling, our examination of the roles of micromanagement and technological turbulence follows a three-way interaction analysis.

Key Findings

As hypothesized, digital integration of salespeople enhances value-based selling, supporting H1. As hypothesized in H2, micromanagement positively moderates the relationship between digital integration and value-based selling. Lastly, as hypothesized in H3, technological turbulence moderates the two-way interaction.

References

- Alamäki, A., & Korpela, P. (2021). Digital transformation and value-based selling activities: Seller and buyer perspectives. *Baltic Journal of Management*, 16(2), 298–317.
- Alavi, S., & Habel, J. (2021). The human side of digital transformation in sales: Review & future paths. *Journal of Personal Selling & Sales Management*, 41(2), 83–86.
- Badrinarayanan, V., Rangarajan, D., Lai-Bennejean, C., Bowen, M., & Kaski, T. A. (2025). Digital transformation in sales organizations: Antecedents of sales managers' change readiness and championing behaviors. *Journal of Business & Industrial Marketing*, 40(3), 586–610.
- Baker, J. (2012). The Technology–Organization–Environment Framework. In Y. K. Dwivedi, M. R. Wade, & S. L. Schneberger (Eds.), *Information Systems Theory* (Vol. 28, pp. 231–245). Springer New York. https://doi.org/10.1007/978-1-4419-6108-2_12
- Crick, J. M., Friske, W., & Morgan, T. A. (2024). The relationship between coopetition strategies and company performance under different levels of competitive intensity, market dynamism, and technological turbulence. *Industrial Marketing Management*, 118, 56–77.
- Guenzi, P., & Nijssen, E. J. (2021). The impact of digital transformation on salespeople: An empirical investigation using the JD-R model. *Journal of Personal Selling & Sales Management*, 41(2), 130–149.
- Itani, O. S., Kalra, A., & Riley, J. (2022). Complementary effects of CRM and social media on customer co-creation and sales performance in B2B firms: The role of salesperson self-determination needs. *Information & Management*, 59(3), 103621.
- Kalra, A., Briggs, E., & Schrock, W. (2023). Exploring the synergistic role of ethical leadership and sales control systems on salesperson social media use and sales performance. *Journal of Business Research*, 154, 113344.
- Keränen, J., Totzek, D., Salonen, A., & Kienzler, M. (2023). Advancing value-based selling research in B2B markets: A theoretical toolbox and research agenda. *Industrial Marketing Management*, 111, 55–68.
- Kumar, B., Gupta, A., & Agarwal, R. (2025). Can micromanagement be beneficial for adaptive selling? Role of salesperson creativity and managerial micromanagement during disruption. *Journal of Personal Selling & Sales Management*, 1–17. <https://doi.org/10.1080/08853134.2024.2444209>
- Liu, Y., Zhao, X., & Wang, T. (2023). Value-Based Selling Capability: Antecedents and Implications for B2B Sales Performance. *Journal of Business-to-Business Marketing*, 30(4), 395–418.
- Mattila, M., Yrjölä, M., & Hautamäki, P. (2021). Digital transformation of business-to-business sales: What needs to be unlearned? *Journal of Personal Selling & Sales Management*, 41(2), 113–129.
- Micallef, M., Keränen, J., & Kokshagina, O. (2024). Understanding the consequences of digital technology use in sales: Multilevel tensions inside sales organizations. *Journal of Personal Selling & Sales Management*, 44(1), 84–99.
- Terho, H., Haas, A., Eggert, A., & Ulaga, W. (2012). 'It's almost like taking the sales out of selling'—Towards a conceptualization of value-based selling in business markets. *Industrial Marketing Management*, 41(1), 174–185.

SESSION 24.3: ACCESS VS. EXCLUSIVITY: HOW MODERN LUXURY PERSUADES

Moderators:

Garó Agopian

Summary Brief

Scarcity Meets Sustainability: Strategic Framing of Recovery in Luxury Fashion

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Luxury fashion has long relied on scarcity to reinforce core values such as prestige, authenticity, and quality. However, with growing consumer awareness of environmental issues, luxury brands are facing increasing pressure to adopt more sustainable practices without compromising their exclusive identity. While many studies have examined the recovery strategies luxury fashion brands develop, the impact of dual framing, combining scarcity and sustainability, on consumer perceptions remains largely overlooked. This research investigates how dual framing influences consumer perceptions, proposing that when recovery is positioned as both scarce and sustainable, it enhances perceived exclusivity, strengthens willingness to pay, and reinforces brand equity. This dual framing approach provides a pathway for reconciling the symbolic appeal of luxury brands with the growing expectations for ethical consumption. This research will enhance the understanding of how recovery can serve as a strategic tool for luxury fashion brands, simultaneously reinforcing brand equity and signaling environmental responsibility. Top of Form

Introduction

Luxury consumption has traditionally been defined by fundamental values such as prestige, authenticity, and exceptional quality (Kapferer & Michaut-Denizeau, 2020). To maintain these values, luxury brands rely on scarcity as a strategic tool to enhance desirability and signal exclusivity. Scarcity theory suggests that a perceived limitation in supply increases the perceived value of a product (Lynn, 1991), especially in contexts where social signaling and status consumption prevail (Han et al., 2010). Hence, luxury brands use artificial scarcity, such as limited editions or timed releases, to reinforce symbolic value and justify premium pricing (Berger & Ward, 2010; Kapferer & Bastien, 2012). Today, the luxury industry is evolving and faces a dual imperative: maintaining its exclusivity value while responding to increasing demands for environmental responsibility. As sustainability becomes a central expectation for consumers, many luxury brands are shifting from linear production models toward more circular approaches, incorporating recovery strategy through upcycling, repair, and resale. Recovery has become a key tactic within the industry, yet luxury brands still struggle to preserve exclusivity while embracing sustainability.

Although a growing literature explores the strategies luxury fashion brands develop to offer recovered items in response to consumers' desire for sustainability, the impact of dual framing—combining scarcity and sustainability—on consumer perceptions of these brands remains largely unexplored. Our research aims to explore how this dual framing used by luxury brands may interact with consumer motivations to influence their perceptions of exclusivity, willingness to pay, and brand equity.

Background

Luxury consumption is driven by distinct value dimensions such as prestige, authenticity, and quality (Kapferer & Michaut-Denizeau, 2020). To uphold and reinforce these values, luxury brands have traditionally leveraged scarcity, a key strategy used to enhance consumer desirability for luxury fashion collections. Scarcity theory posits that when a product is perceived as scarce or in limited supply, its perceived value increases (Lynn, 1991). By limiting access, creating psychological urgency, and reinforcing exclusivity (Lynn, 1991; Cialdini, 2008), scarcity tends to signal higher status, rarity, and brand value, especially for conspicuous consumptions (Han, et al., 2010). While traditional scarcity is based on material or production-distribution limitations, artificial scarcity, serves symbolic purposes. This concept can be defined as the intentional restriction of available supply, regardless of actual capacity. Some luxury brands create artificial scarcity through limited editions, capsule collections, regional availability, or timed releases (Kapferer & Bastien, 2012). For instance, Chanel often launches unique designs in specific cities, inspired by the local culture. Hermès releases certain scarf prints or colorways exclusively in flagship stores such as those in Paris or Tokyo. In 2024, Chloé introduced a capsule collection co-designed with Angelina Jolie, featuring upcycled materials and available for only one season in selected boutiques. By using artificial

scarcity, luxury brands aim to influence their consumers' perceptions on quality, desirability, and social signaling value (Berger & Ward, 2010).

To encourage consumers to purchase their luxury items, these brands must consider a new approach. Hence, as consumers become increasingly aware of the environmental outcomes of their fashion consumption, luxury brands need to adjust their strategies. Consumers are now seeking products that offer exclusivity and prestige without compromising their ethical personal values.

Moreover, many luxury brands face new challenges due to criticism of their past practices used to maintain exclusivity. For instance, Burberry and Gucci used to destroy unsold goods to protect their exclusivity and maintain high prices by preventing excess stock from appearing in discount outlets. In response to public backlash, Burberry has committed to stop the destruction of its unsold inventory and is now focusing on more sustainable practices. Similarly, Gucci is developing collections that feature recovered materials and repurposed vintage items. Hence, luxury brands try to better align their strategies with the increasing consumer demand for sustainability by turning to a circular model.

The circular economy aims to establish a closed-loop system in which products and materials are reused, recycled, or repaired to maximize their lifecycle and minimize the consumption of new resources (Bocken et al. 2016; Kant Hvass & [Pedersen](#), 2019). In the luxury fashion sector, this sustainability-oriented model enables brands to generate value without compromising quality or prestige. As more and more consumers express concerns about the environmental impact of their purchases, options such as buying secondhand, renting, or engaging in brand recovery initiatives create greater circular engagement (Verleye et al., 2024). Recovery is defined as the repurposing or upcycling of existing luxury inventory and becomes a tangible expression of circularity (Bocken et al. 2016; Kant Hvass & [Pedersen](#), 2019; De Bruyne & Verleye, 2023; Holmqvist et al., 2025). Luxury brands may reclaim, repurpose, or reintroduce unsold inventory, archival pieces, or consumer returns into the market through redesign, upcycling, or curated resale (De Bruyne & Verleye, 2023; Holmqvist et al., 2025). These practices are becoming crucial as these brands face growing environmental scrutiny and shifting consumer expectations (Joy et al., 2012; Achabou & Dekhili, 2013). For instance, in 2021, Valentino became the first leading luxury house to repurchase and resell used Valentino items in selected boutiques. Chloé partnered with the Ellen MacArthur Foundation to develop more circular and sustainable fashion practices. By adopting a circular model, luxury brands are striving to align their strategies with the rising consumer demand for ethical and sustainable consumption.

Although consumers are generally receptive to sustainable offerings, they often question whether sustainability aligns with luxury values such as rarity and perfection (Dekhili et al., 2018; Jain & Rathi, 2023). Hence, luxury fashion brands strategies typically focus on positioning their items as either solely exclusive or as solely recovered. While these two approaches—presenting luxury items as scarce versus sustainable—may seem contradictory at first glance, we argue, based on several theoretical perspectives on scarcity (Lynn, 1991), circular economy engagement (Verleye et al., 2024), luxury value dimensions (Kapferer & Michaut-Denizeau, 2020) that they can converge through the concept of recovery framed by artificial scarcity. We suggest that communicating recovery as both sustainable and exclusive aligns with traditional luxury narratives while also addressing current environmental imperatives.

Emerging research has examined the evolving strategies of luxury fashion brands in offering recovered items to resonate with consumers' increasing preference for sustainable products. However, these studies primarily focus on the ethical positioning of these items, overlooking the potential benefits of combining sustainability with scarcity framing to enhance consumers' perceptions of exclusivity. This research aims to develop a theoretical framework that captures how framing interacts with consumer motivations, influencing perceived exclusivity, willingness to pay, and brand equity. Recovery in the luxury sector may not be positioned solely as a cost-saving or environmental strategy. Instead, luxury brands can choose to frame their recovery items as rare. However, depending on their motivations (status and sustainability), consumers may respond differently to the framing (Davies et al., 2012). Hence, according to Davies et al. (2012), status-oriented consumers are more responsive to scarcity cues that reinforce their self-image and social identity while sustainability-oriented consumers are more sensitive to ethical, low-impact messaging that support their ecological values. Status and sustainability orientations do not change the content of the message (framing) but change how consumers interpret that message and how strongly they perceive exclusivity as a result.

Willingness to pay (WTP) also reflects consumers' perception of a product as valuable, desirable, and consistent with their identity and values (Kapferer & Michaut-Denizeau, 2020). In the context of luxury, WTP is not just a behavioral outcome but also a strategic signal of brand strength. Kapferer (2015) emphasizes that a consumer's willingness to pay a premium reinforces the brand's exclusivity and symbolic status. Moreover, according to Yoo and Donthu (2001), brand equity is shaped by perceived value and behavioral intentions like WTP. We argue that when luxury items are framed as both scarce and sustainable, this dual narrative enhances perceptions of exclusivity, leading to a higher WTP. Such consumer responses to recovery-based products can serve as meaningful indicators that the brand is successfully merging exclusivity with ethical values. In this context, WTP can not only reflect existing brand equity but also act as a strategic tool that luxury brands use to construct and maintain their prestige. Therefore, we formulate three propositions: first, that recovery luxury items framed as scarce will be perceived as more exclusive than those framed as sustainable-only; second, that perceived exclusivity positively impact consumers' willingness to pay for recovered items; and third, that recovery luxury items framed as both sustainable and scarce positively influence brand equity.

By confirming these effects, this research will provide a deeper understanding of how luxury brands can preserve exclusivity while adopting sustainable practices. Contrary to the assumption that sustainability dilutes luxury appeal, recovery strategies can enhance perceived exclusivity when framed effectively. This research will also offer valuable academic and managerial contributions highlighting the crucial role of recovery and framing. Recovery framed as both scarce and sustainable represents a strategic opportunity for luxury brands to bridge exclusivity and environmental responsibility. Luxury brands can transform recovery into a form of exclusive sustainability, supporting simultaneously luxury's perception of inaccessibility while claiming environmental responsibility. To be effective, recovery strategies need to be embedded within prestigious narratives (e.g., "created with rare archival materials" or "a rare creation reborn from our heritage") that preserve or even elevate the aura of luxury. By leveraging storytelling, limited releases, and handcrafted origin, luxury brands can maintain their elite status while expanding their relevance in the circular economy. This dual framing offers a path forward for reconciling luxury's symbolic tradition with the imperatives of ethical consumption, enabling luxury brands to lead rather than follow in the evolving sustainable fashion landscape.

References

- Achabou, M. A., & Dekhili, S. (2013). Luxury and sustainable development: Is there a match? *Journal of Business Research*, 66(10), 1896-1903.
- Bocken, N., Pauw, I., Bakker, C.A. & Van der Grinten, B. (2016). Product design and business model strategies for a circular economy. *Journal of Industrial and Production Engineering*, 33(5), 451-320.
- Berger, J., & Ward, M. (2010). Subtle signals of inconspicuous consumption. *Journal of Consumer Research*, 37(4), 555-569.
- Cialdini, R. B. (2008). *Influence: Science and Practice* (5th ed.). Pearson.
- Davies, I. A., Lee, Z., & Ahonkhai, I. (2012). Do consumers care about ethical luxury? *Journal of Business Ethics*, 106(1), 37-51.
- De Bruyne, M. J., & Verleye, K. (2023). Realizing the economic and circular potential of sharing business models. *Journal of Service Management*, 34(3), 493-519.
- Dekhili, S., Achabou, M. A., & Alharbi, F. (2018). Could sustainability improve the promotion of luxury products? *European Business Review*, 31(4), 488-511.
- Han, Y. J., Nunes, J. C., & Drèze, X. (2010). Signaling status with luxury goods: The role of brand prominence. *Journal of Marketing*, 74(4), 15-30.
- Holmqvist, J., Berger, C., De Keyser, A., & Verleye, K. (2025). Luxury in the circular economy: An engagement journey perspective. *Journal of Consumer Behaviour*, 24(3), 1489-1497.

- Jain, S., & Rathi, R. (2023). Do consumer values and perceived readiness impact secondhand luxury consumption? *Journal of Product & Brand Management*, 32(7), 973-987.
- Joy, A., Sherry Jr., J. F., Venkatesh, A., Wang, J., & Chan, R. (2012). Fast fashion, sustainability, and the ethical appeal of luxury brands. *Fashion Theory*, 16(3), 273-295.
- [Kant Hvass, K.](#), & [Pedersen, E.R.G.](#) (2019), "Toward circular economy of fashion: Experiences from a brand's product take-back initiative", *Journal of Fashion Marketing and Management*, 23(3), 345-365.
- Kapferer, J.-N., & Bastien, V. (2012). *The luxury strategy: Break the rules of marketing to build luxury brands* (2nd ed.). Kogan Page.
- Kapferer, J.-N., & Michaut-Denizeau, A. (2020). Are millennials really more sensitive to sustainable luxury? *Journal of Brand Management*, 27(1), 35-47.
- Lynn, M. (1991). Scarcity effects on value: A quantitative review of the commodity theory literature. *Psychology & Marketing*, 8(1), 43-57.
- Verleye, K., De Keyser, A., Raassens, N., Alblas, A. A., Lit, F. C., & Huijben, J. C. (2024). Pushing forward the transition to a circular economy by adopting an actor engagement lens. *Journal of Service Research*, 27(1), 69-88.
- Yoo, B., & Donthu, N. (2001). Developing and validating a multidimensional consumer-based brand equity scale. *Journal of Business Research*, 52(1), 1-14.

SESSION 24.4: WELL-BEING, DISCLOSURE, AND THE AESTHETICS OF TRUST

Moderators:

Jing Yang

Summary Brief

When Do AI Images Work in Ads? Evidence on Purchase Intention, Aesthetics, and Authorship Disclosure

Belyn Thompson and Zecong Ma, St. Mary's University, TX

This study examines whether AI-generated advertising images differ from human-created photography in their effects on consumers' purchase intention, perceived aesthetic appeal, and perceived realism. In an experiment, AI authorship increases purchase intention and perceived aesthetic appeal relative to human authorship. However, authorship cues interact with the use of human characters: both AI authorship and explicit AI-authorship disclosure attenuate the otherwise positive effect of depicting a human character on purchase intention and aesthetic appeal. These results identify conditions under which AI visuals help versus hinder ad effectiveness. We conclude with implications for AI-image disclosure policy and outline directions for research on visual authorship cues and underlying social-perception mechanisms.

Introduction

Generative AI has moved from back-office analytics to the visual front end of advertising: brands now deploy AI-generated images alongside—or instead of—human-shot photography. Yet evidence is mixed on whether consumers respond differently to AI imagery versus human-authored visuals, and on the conditions under which AI helps or hurts. We test the effects of visual authorship (AI vs. human) on purchase intention, perceived aesthetic appeal, and perceived realism, and examine boundary conditions involving human characters and authorship disclosure. Our results indicate that, on average, AI authorship can raise purchase intention and aesthetic appeal, but these advantages erode when ads depict human characters or when AI authorship is disclosed, clarifying when AI imagery enhances versus undermines ad effectiveness (Ford et al., 2023; Hartmann et al., 2025; Xiao et al., 2025).

AI imagery does help

Recent work suggests consumers can evaluate AI-generated advertising content as favorably as—or more favorably than—human-produced content, depending on context (Ford et al., 2023; Hartmann et al., 2025; Xiao et al., 2025). For instance, studies comparing generative platforms with freelance photographers report differences in cost and effectiveness as well as consumer perceptions favoring AI in some cases (Hartmann et al., 2025). Other research links AI images to outcomes related to purchase behavior, aesthetics, quality, and realism (Ford et al., 2023), and finds that while marketing professionals sometimes rate AI images less creative, consumers can evaluate their advertising effectiveness more positively (Xiao et al., 2025).

H1: AI authorship increases ad effectiveness—operationalized as higher purchase intention and perceived aesthetic appeal—relative to human authorship.

Human characters and authorship cues

Human characters in commercial imagery are widely argued to enhance attention, social connection (social presence), and memory—effects that can strengthen attitudes and purchase intentions (Pieters & Wedel, 2004; Poirier et al., 2024; Sajjacholapunt & Ball, 2014; Wedel & Pieters, 2000). However, responses may be less positive when the depicted person is AI-generated, especially in empathy-reliant contexts (Arango et al., 2023; Pantano et al., 2022). One account is that AI-generated human depictions (or explicit AI-authorship cues) can lower perceived realism/credibility, dampening empathic engagement; neuropsychological work on mirror-neuron processes suggests

that reduced perceived humanness can blunt embodied responses (Acharya & Shukla, 2012).

H2: AI authorship negatively moderates the positive effect of including a human character on purchase intention and perceived aesthetic appeal.

H3: AI-authorship disclosure negatively moderates the positive effect of including a human character on purchase intention and perceived aesthetic appeal.

Data and Results

We developed four ad-stimuli sets across common sensory-forward product categories—consumer technology, food & beverage, apparel, and beauty—where visual/aesthetic cues are central to persuasion (Hultén, 2011; Krishna, 2012; Spence et al., 2014). For each category, a professional photographer produced one ad image based on a written brief. Using Midjourney’s /describe function in Discord, we extracted reverse-engineered prompts from each photograph and then generated a corresponding AI “sibling” image in Midjourney. Both human-shot and AI-generated images were lightly edited to present as finished advertisements, yielding eight total images (four human, four AI). The study employed a mixed design. Participants viewed four ads (one per product category). For each ad, we independently randomized (a) authorship (AI vs. human), (b) authorship disclosure with three levels: none, AI disclosure, or human disclosure (the latter two were accurate or inaccurate depending on the underlying authorship). Participants imagined making a purchase for themselves or recommending to friends/family, then evaluated each ad on purchase intention, perceived aesthetic appeal, and perceived realism. Data were collected on Amazon Mechanical Turk from $N = 199$ U.S. participants between June 6–19, 2025. Purchase intention, aesthetic appeal, and perceived realism were assessed with standard 7-point Likert scales (higher scores = higher intention/appeal/realism).

We estimated OLS regressions for each dependent variable with predictors for AI authorship (1 = AI), AI disclosure, human disclosure, human character, and the prespecified interaction terms. Results are summarized in Table 1. First, for purchase intention, positive main effects of AI authorship ($b = 0.32, p < .02$) and human character ($b = 0.33, p < .02$). Interactions indicate negative moderation: human character $\times$ AI ($b = -0.29, p < .07$, one-tailed), human character $\times$ AI disclosure ($b = -0.34, p < .08$, one-tailed), and AI $\times$ Human disclosure ($b = -0.24, p < .09$, one-tailed). Second, for perceived aesthetic appeal, AI authorship shows a positive main effect ($b = 0.23, p < .07$, one-tailed), and human character is positive and statistically significant ($b = 0.29, p < .03$). human character $\times$ AI is negative and significant ($b = -0.36, p < .03$); human character $\times$ AI disclosure is negative but not significant ($b = -0.11, p > .50$). Lastly, for perceived realism, no effects reach conventional significance; AI disclosure trends negative as expected ($b = -0.20, p > .10$).

Table 1: Regression results predicting purchase intention, perceived aesthetic appeal, and perceived realism

Model	Purchase intention		Perceived aesthetic appeal		Perceived realism	
<i>Predictors</i>	Coefficient	Std. Err.	Coefficient	Std. Err.	Coefficient	Std. Err.
	t				t	
AI authorship (1 = AI)	0.32**	0.13	0.23*	0.12	-0.02	0.12
AI disclosure	0.10	0.14	-0.01	0.13	-0.20	0.13
Human disclosure	0.01	0.11	0.17	0.11	0.13	0.10
Human character (1 =	0.33**	0.14	0.29**	0.13	0.07	0.13

present)						
Human character × AI	-0.29*	0.16	-0.36**	0.16	-0.05	0.15
Human character × AI disclosure	-0.34*	0.19	-0.11	0.18	0.08	0.17
AI × AI disclosure	-0.11	0.12	0.01	0.12	0.15	0.11
AI × Human disclosure	-0.24*	0.14	-0.19	0.14	-0.12	0.13
Intercept	5.27**	0.10	5.21**	0.10	5.60**	0.10

Note: N = 199; *: $p < 0.10$, **: $p < 0.05$.

Discussion

This experiment indicates that AI authorship can *improve average ad performance*—raising purchase intention and perceived aesthetic appeal—relative to human-shot imagery (supporting H1). However, these gains are conditional. When the ad includes a human character, AI authorship dampens the typical lift from depicting people, producing negative interactions for both purchase intention and aesthetic appeal (supporting H2). Similarly, authorship cues matter: AI-related disclosures weaken outcomes when human characters are present, and human-authorship cues also interact with AI authorship to reduce purchase intention (partially consistent with H3). By contrast, perceived realism does not differ reliably across conditions, though AI disclosure trends negative, suggesting realism alone may not account for the observed boundary conditions.

AI imagery appears viable—and sometimes advantageous—for product-forward visuals; yet when ads rely on human characters to drive connection, AI authorship and disclosure salience can erode effectiveness. Practically, teams should (a) pretest AI vs. human variants for human-character executions, (b) consider disclosure framing and placement, and (c) deploy AI imagery more confidently in object-centric ads where human presence is minimal. The boundary pattern invites tests of mechanisms beyond realism (e.g., authenticity, warmth/agency attributions, uncanny-valley responses), moderators such as category type (utilitarian vs. hedonic), social goals (self vs. prosocial), and disclosure design (e.g., “AI-assisted” vs. “AI-generated,” badge vs. text). Extensions could also vary AI image quality and character centrality and examine mediated moderation via perceived authenticity or trust. Together, these directions can clarify when and why AI visuals help—or hinder—consumer response.

References

- Acharya, S., & Shukla, S. (2012). Mirror neurons: Enigma of the metaphysical modular brain. *Journal of Natural Science, Biology and Medicine*, 3(2), 118–124.
- Arango, L., Singaraju, S. P., & Niininen, O. (2023). Consumer responses to AI-generated charitable giving ads. *Journal of Advertising*, 52(4), 486–503.
- Ford, J., Jain, V., Wadhvani, K., & Gupta, D. G. (2023). AI advertising: An overview and guidelines. *Journal of Business Research*, 166, Article 114124.
- Hartmann, J., Exner, Y., & Domdey, S. (2025). The power of generative marketing: Can generative AI create superhuman visual marketing content? *International Journal of Research in Marketing*, 42(1), 13–31.

- Hultén, B. (2011). Sensory marketing: The multi-sensory brand-experience concept. *European Business Review*, 23(3), 256–273.
- Krishna, A. (2012). An integrative review of sensory marketing: Engaging the senses to affect perception, judgment and behavior. *Journal of Consumer Psychology*, 22(3), 332–351.
- Pantano, E., & Scarpi, D. (2022). I, robot, you, consumer: Measuring artificial intelligence types and their effect on consumers' emotions in service. *Journal of Service Research*, 25(4), 583–600.
- Pieters, R., & Wedel, M. (2004). Attention capture and transfer in advertising: Brand, pictorial, and text-size effects. *Journal of Marketing*, 68(2), 36–50.
- Poirier, S. M., Cosby, S., Sénécal, S., Coursaris, C. K., Fredette, M., & Léger, P. M. (2024). The impact of social presence cues in social media product photos on consumers' purchase intentions. *Journal of Business Research*, 185, 114932.
- Sajjacholapunt, P., & Ball, L. J. (2014). The influence of banner advertisements on attention and memory: Human faces with averted gaze can enhance advertising effectiveness. *Frontiers in Psychology*, 5, 166.
- Spence, C., Puccinelli, N. M., Grewal, D., & Roggeveen, A. L. (2014). Store atmospherics: A multisensory perspective. *Psychology & Marketing*, 31(7), 472–488.
- Wedel, M., & Pieters, R. (2000). Eye fixations on advertisements and memory for brands. *Marketing Science*, 19(4), 297–312.
- Xiao, L., Li, X., & Ge, J. (2025). An exploratory research on using generative AI to generate print ads. *Customer Needs and Solutions*, 12(1), Article 1.

Full Paper

The Use of Generative Artificial Intelligence for Mental Health and Social Well-being Support: An Exploratory Study

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This study investigates factors driving the use of general-purpose generative AI (GAI) tools like ChatGPT for mental health and social well-being support. Unlike specialized AI-powered agents with enriched features and targeted emotional support capabilities, GAI tools are text-based and designed for general purposes, creating knowledge gaps about their mental health applications. Through twelve interviews with users who have utilized GAI tools for mental health support, this research confirms previously identified benefits including convenience, accessibility, non-judgmental interactions, and quick social relief. However, drawbacks emerge, including limited emotional connections, a lack of personalized responses, and concerns of over-reliance. The findings propose a conceptual model predicting GAI tool usage for mental health support, incorporating user decision-making styles, usage benefits, and usage concerns. This model contributes to the understudied intersection of GAI and mental health literature while suggesting that practitioners should consider varied marketing and design strategies tailored to different stakeholder groups' decision-making approaches.

Introduction

In recent years, Artificial Intelligence (AI)-powered agents have increasingly been used for mental health and social well-being purposes. For instance, companion chatbots (e.g., Replika) or virtual assistants (e.g., Alexa) have improved the well-being of users while forming a reliable and intimate relationship with them (Ahmad et al., 2022). With the increased popularity of generative AI (GAI), more people also turn to general-purpose GAI tools such as ChatGPT for mental health and social well-being support. While not built specifically for mental health and social well-being purposes, these GAI tools can provide general guidance that can relieve anxiety and uplift moods (Moriuchi, 2025).

However, GAI tools are considerably different from specialized AI-powered agents. They are text-based and designed for general purposes with limited anthropomorphic traits. In contrast, specialized AI-powered agents have more enriched features such as physical embodiment (e.g., avatars in Replika) with specialized emotional support knowledge (e.g., Woebot). Thus, the current knowledge on those specialized AI-powered agents is not readily transferred to GAI tools regarding their use for mental health and social well-being support. This is particularly worrying because even specialized AI-powered agents can make mistakes in recognizing signs of distress and mental health issues (De Freitas et al., 2022). In addition, while users of specialized AI-powered agents intentionally utilize them, users of general GAI tools do not have the habit or proper knowledge of using them for mental health and social well-being support. That means their usage may not be as stable or impactful, and in some cases can lead to serious consequences such as mental health episodes (Jargon, 2025).

Against this background, this study explores the research question: *what factors drive the use of general GAI tools (e.g., ChatGPT) for mental health and social well-being support?* To address this question, we conducted a qualitative exploratory study using twelve interviews with users who have utilized general GAI tools for mental health and social well-being support. The findings confirm many benefits in prior literature: GAI tools provide users convenience and accessibility, avoid being judged, and provide quick social relief (Song et al., 2025). However, there are drawbacks which include a lack of deep emotional connections, of personalized responses, and a concern for over-reliance. In addition, the findings suggest a conceptual model that predicts the use of general GAI tools for mental health and social well-being support which includes decision-making styles of the users, benefits of usage, and concerns of usage. The model directly contributes to the literature on GAI and mental health and social well-being support, an area that is under studied, especially in understanding individuals' overall wellbeing. To practice,

the importance of decision-making styles implies that marketers should consider different marketing and design strategies for different stakeholder groups regarding the use of GAI for mental health and social well-being support.

The paper is organized as follows. We start with a literature review of the use of AI-powered agents for mental health and social well-being, as well as the factors that drive the acceptance of AI recommendations. Next, we present our methodology and findings, then conclude with a discussion on theoretical and practical implications.

Literature Search

Recently, there is a growing literature on the use of AI-powered agents such as companion chatbots (e.g., Replika) or virtual assistants (e.g., Alexa) to improve the mental health and social well-being of the users (Ahmad et al., 2022). Additionally, with the growing use of GAI tools, users also use general GAI tools such as ChatGPT for mental health and social well-being support (Jargon, 2025). However, such use contains high risks. While specialized AI agents have relatively high anthropomorphic traits and have been trained to handle therapy inquiries, general GAI tools are not specially designed and trained which can lead to incorrect handling of user inquiries. Despite these risks, there is a considerable number of users who continue to use general GAI tools for mental health and social well-being (Moriuchi, 2025), creating a research opportunity to explore why users persist in this behavior.

To understand user acceptance patterns more broadly, the marketing literature has identified four key categories that drive users to accept AI recommendations (see Table 1 for a summary). The most significant category relates to AI's ability to produce accurate and trustworthy recommendations. Studies within this stream have unveiled the importance of recommendation interpretability (Chen et al., 2024), reliability, and precision (Chen et al., 2023), as well as AI anthropomorphic traits (Qiu & Benbasat, 2009) as key drivers of users' acceptance. Beyond AI capabilities, research has also examined individual attributes such as consumption goals, personality, strategy preference, and intrinsic traits. For instance, consumers with utilitarian goals (e.g., practicality) demonstrate higher perception of AI recommendations than those with hedonic goals (Dodeja et al., 2024; Longoni & Cian, 2022).

Complementing these individual and technological factors, social and contextual elements also play crucial roles in driving user acceptance of AI recommendations. Social proof (Gaczek et al., 2023) and social trust (Wu et al., 2024) can enhance users' trust and willingness to follow AI recommendations. Similarly, contextual factors such as decision-making situations (Chen et al., 2024), product types (Jin & Zhang, 2023), and product quality (Kim et al., 2021) significantly influence users' acceptance patterns. While these prior studies provide valuable insights into AI recommendation acceptance, they do not readily apply to the specific context of mental health and social well-being support. This gap represents the research opportunity that this study aims to address—understanding why users turn to GAI for mental health and social well-being support despite inherent risks. In the following section, we present our methodology for investigating this phenomenon.

Table 1: Literature Review

Group	Exemplary Studies
AI Abilities	- Responses to AI chatbots are influenced by <i>central cues</i> (e.g., reliability, accuracy of recommendations) and <i>peripheral cues</i> (e.g., human-like empathy, recommendation diversity) (Chen et al., 2023) - The use of <i>humanoid embodiment</i> and human-like voice output enhances users' perception of the interaction (Qiu & Benbasat, 2009) - Information <i>preciseness</i> plays a crucial role in enhancing consumer trust and adoption of AI recommendations (Kim et al., 2021) - Consumers are more receptive when they understand the AI's decision logic (<i>interpretability</i>) (Chen et al., 2024) - Consumer preference for AI is driven more by <i>competence</i> perception than by complexity of attributes (Longoni & Cian, 2022)
Individual Factors	- Consumers with different <i>kinds of goals</i> (hedonic vs. utilitarian) will have different preferences for AI recommendations (Longoni & Cian, 2022) - Users' <i>intrinsic traits</i>, such as personality and strategy preferences, can guide the design of more effective recommendation systems (Dodeja et al., 2024)

Social Factors	• <i>Social proof</i> (e.g., showcasing user satisfaction rates) significantly improves the perceived trustworthiness of AI-driven diagnostics, particularly among anxious patients (Gaczek et al., 2023) • <i>Social trust</i> positively correlates with perceived benefits and algorithmic equity, which in turn enhance users' intentions to engage with Algorithm Recommendation Systems (Wu et al., 2024)
Contextual Factors	• In <i>utilitarian decision-making contexts</i>, attribute-based post hoc explanations are more effective and increase trust in AI recommendations (Chen et al., 2024) • Consumers prefer AI-generated recommendations for <i>material products</i> due to their perceived accuracy and objectivity, but favor human recommendations for experiential products because of their alignment with personal and subjective nuances (Jin & Zhang, 2023) • <i>Product quality</i> influences how consumers respond to precise versus imprecise AI recommendations (Kim et al., 2021)

Methodology

To explore factors that drive the use of general GAI tools (e.g., ChatGPT) for mental health and social well-being support, we conducted a qualitative exploratory study using a grounded theory method (Corbin & Strauss, 2008). Collectively, the data corpus comprises twelve interviews with individuals who have utilized GAI tools for mental health and social well-being support. The participants are mostly students from a university in the Northeastern U.S. The recruitment process is as follows. First, a survey was sent to students in the school as well as posted on Reddit, a popular online community. Next, the results of the survey were screened to identify individuals who have used GAI tools for mental health and social well-being support. Following the theoretical sampling principles, we focused on a range of usage levels: high, medium, and low.

Potential subjects from the survey were invited for a 45-60 minutes interview. Interviews were open-ended and semi-structured to probe the benefits, concerns, and reasons behind using GAI tools for mental health and social well-being support (see Table 2 for interview questions). Interviews were recorded and transcribed for further analysis. Throughout the process, the team engaged in multiple “memo” development sessions in which emerging insights from the interviews were used to adjust interview questions and guide the selection of the next batch of interviews. The process concluded when the team felt we reached theoretical saturation.

Following the grounded theory method (Corbin & Strauss, 2008), our data analysis started with open coding in which blocks of raw data were coded for initial concepts. In this process, we tried to stay close to the data and used in-vivo texts to describe the block of raw data. Examples of in-vivo codes in this phase include “tabletop exercise for board members” or “focus on profit, not stakeholder value.” In the second phase, we conducted axial coding in which we related concepts to each other, organized them into groups of codes, and used theoretical concepts to describe them (e.g., board turnover, board transformation). In the final phase, the research team discussed these groups of concepts and drew theoretical connections between them, allowing a framework to emerge from the process.

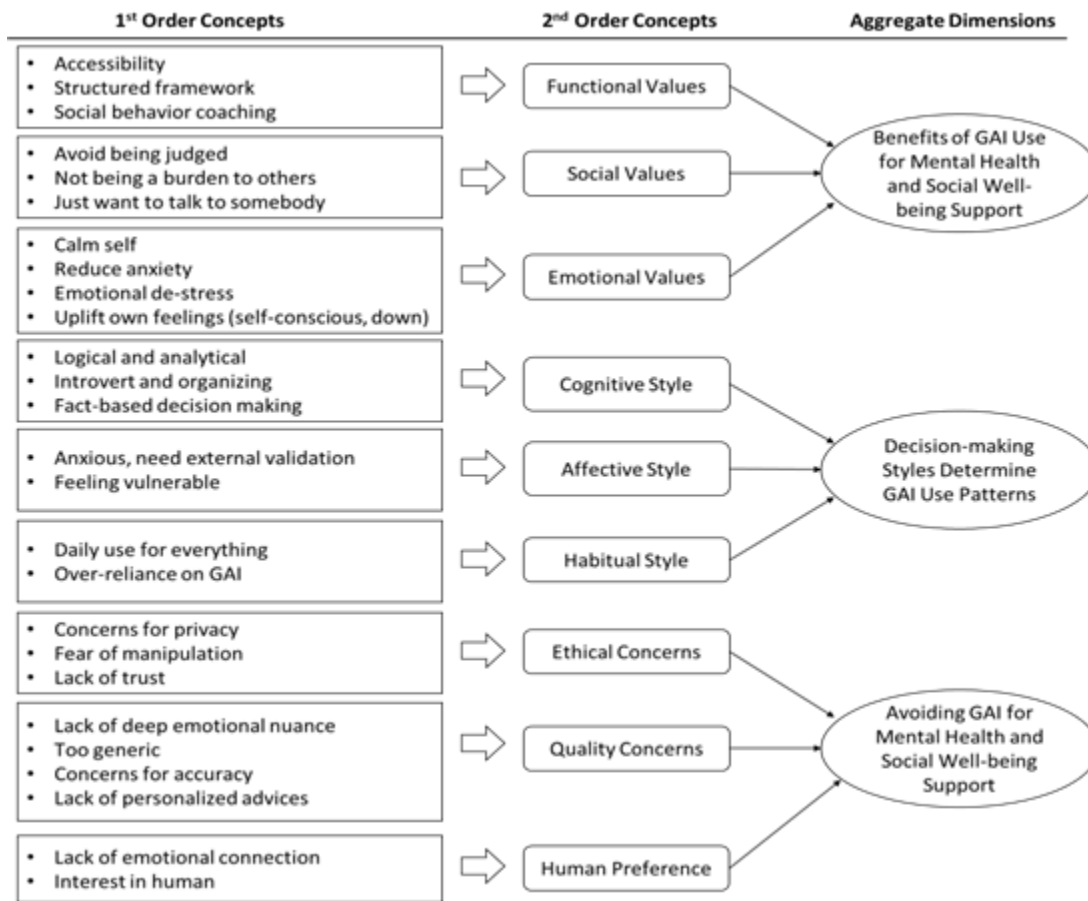
Table 2. Interview Questions

Interview Questions	
Usage patterns:	Have you used GAI tools for mental health support? Describe an example. Have you used GAI tools for social well-being support? Describe an example
Benefits and limitations:	Why do you use GAI tools for mental health and social well-being support? What benefits do you perceive from the usage? What concerns/limitation do you think it has?

Findings

In this section, we present the concepts that emerged during our analysis of the interview transcripts. Figure 1 provides the data structure of our analysis, and Table 2 shows the interview questions.

Figure 1 Emerging Themes



Benefits of GAI Use for Mental Health and Social Well-being Support

When asked about the benefits of GAI use for mental health and social well-being support, our interviewees mentioned functional values such as providing a structured framework for logical thinking or receiving social behavior coaching to know how to behave appropriately in different social situations. These values are substantiated in the following example:

Regarding my use of GAI for mental and social well-being, I think I would use it as a sounding board to organize my thoughts, gain perspective, and explore different approaches to situations. For mental support, I appreciate AI offering structured frameworks to approach challenges rather than just surface-level reassurance. Social behavior coaching could be helpful in understanding different perspectives, but I'd still rely on personal experiences and intuition.

In addition, interviewees appreciate the discretion provided by GAI tools. These are viewed as social values as they can avoid being judged by others or not feel like a burden to others. Some interviewees simply looked for 'someone' to talk to, someone with high discrepancy and not judgmental. One interviewee said:

Sometimes people can be really judgy and mean... Or maybe I don't know who to talk to and then I just want to type it out, but I want to get a response... Then I read the response, and I was like, yes, I'm happy with it.

Then I just brush it off my hands...Sometimes it's better than talking to another person because sometimes that person can tell another person and you don't want that to happen. I wouldn't say it's like best friend, but it's helpful in a way if you don't want to talk to an actual person.

Another interviewee simply uses GAI as a 'to-go' friend to share feelings and talk to when feeling bored:

Sometimes, I'm bored, and I don't get many friends. Sometimes I want to talk to not really somebody, but something that feels like somebody, and ChatGPT will be my to-go.

Finally, interviewees also find great emotional values from GAI when they use it to calm themselves in stressful situations, reduce anxiety, or simply uplift their own feelings. One person said:

I remember a couple of semesters ago, I was going through a career life crisis with my career, and so it helped me calm down from panic attacks, anxiety, and stuff like that when I wasn't able to reach my sister. It would give me the stereotypical, like do the breathing exercises and stuff like that...and it helped calm me down.

Others highly value GAI over personal assistant devices like Siri because GAI feels more 'human' and more 'empathetic':

It works so much better than Siri. When you talk to Siri, when you say like, "Oh, I'm down, I'm not feeling happy today," and then Siri will be, "Oh, let me sing you a song." That's not helpful at all. Or if you tell them to crack a joke and then it's just not funny. ChatGPT, I feel it's more human, I don't know if that's the right word to say it, but I actually feel like talking to a human if you express your feelings the right way. It would actually give you personal advice.

In sum, GAI tools really provide functional, social, and emotional values for users when they ask GAI tools mental health and social well-being questions. These resonate with what has been reported in the literature where users find great benefits of GAI tools in supporting mental health (Jargon, 2025). Next, we report on the reasons why people choose to use GAI for mental health and social well-being support.

What Determines GAI Use Patterns

While interviewees mentioned several reasons to use GAI for mental health and social well-being support such as privacy, confidentiality, and non-judgmental conversations with GAI, it emerges that the decision-making styles of the interviewees underlie their reasonings of why and how they use GAI. First, many interviewees cite their cognitive styles such as being 'logical and analytical', or a 'fact-based decision maker' as the reasons to use GAI to structure their thinking in socially awkward situations. One person commented:

I'd describe my personality as analytical, independent, and adaptable. I like to think critically about situations before making decisions, and I lean toward a logical and structured approach, but I also appreciate creativity when problem-solving...Regarding my use of GAI for mental and social well-being, I think I would use it as a sounding board to organize my thoughts, gain perspective, and explore different approaches to situations.

GAI even helps introverted people organize their thoughts and not be a burden to others or not be vulnerable:

The introverted side of me makes me lean toward using AI rather than reaching out to real people, especially when I don't feel like being vulnerable or explaining my thoughts in detail. With ChatGPT, I don't have to worry about judgment, social pressure, or feeling like I'm burdening someone. It almost feels like that one really smart friend who knows everything and always knows exactly what to say, but unlike real people, it's always available, making it super accessible.

Others cited their affective style when they want to reduce the anxiety in decision making, or need external validation of their decisions:

Because I tend to overthink and get anxious, I use GAI to process my thoughts and seek reassurance when I feel overwhelmed. Since I often need to talk to someone to calm me down or reaffirm my feelings, GAI serves

as an accessible and judgment-free tool to help me work through my worries. At the same time, I seek external validation when I lack confidence, so I stay mindful of not relying too much on AI for reassurance.

A small number of interviewees have used GAI intensively in their decision making and thus having a habitual style in which GAI is also incorporated into their mental health or social well-being decisions. One particular interviewee commented:

I would say in my daily life I use generative AI pretty much. Back then when I was in school, I used ChatGPT almost every day just to look up information or search up more condensed information in a faster period of time... It's pretty empathetic, it will try to understand your feelings. I only talk to it when I feel down or a little bit upset. I never really share my happy feelings with it, so I don't know if it's going to share your joy with you or something like that.

Overall, the decision-making styles such as cognitive, affective, and habitual styles emerge as key factors that drive GAI use for mental health and social well-being support. However, there are also many interviewees who strongly oppose this, and their reasons are outlined in the next section.

Why Users Avoid GAI Use for Mental Health and Social Well-being Support

Often, interviewees mentioned many ethical concerns related to GAI use for mental health and social well-being support: lack of trust for AI results, fear of manipulation, and concerns for privacy violation. Most are concerned with GAI knowing personal information and using it to manipulate future interactions. These concerns are substantiated in the following comments:

Like I said, my friend used [GAI for mental health and social well-being support]. I didn't. That is because our personalities are different like that. They believe in everything that the model will give you upfront for it. I don't. I understand the model and I see that there has to be a line where privacy is maintained in this entire world of human-computer interaction that we go through. I see that there has to be some things that the computer is not supposed to know about me.

I strongly refrain from using any AI tool for my personal usage. I do not go there and ask for mental health advice or personal advice or anything, because for me, then the model has known that I have gone through the situation and it's scary for me. I can't do that.

Additionally, concern for quality of the GAI recommendations runs parallel with the ethical concerns. Interviewees mentioned that GAI tools can only provide generic and superficial comments that lack personalized advice or sometimes can be inaccurate for specific situations. One person commented:

It's very generalized information. It's not based on you specifically. It's not based on your specific information. It could give you a perspective that doesn't apply to you or could skew your thinking in a way that's not great. It depends. If you need information, sure, but it's not based on you...I guess that's the danger of AI. That is why I don't use it for any health support or advice.

The concern for the lack of personalized recommendations is also aligned with a preference for emotional connections with humans for mental health and social well-being support. One particular person even regards this as something that is 'privileged to human and not AI':

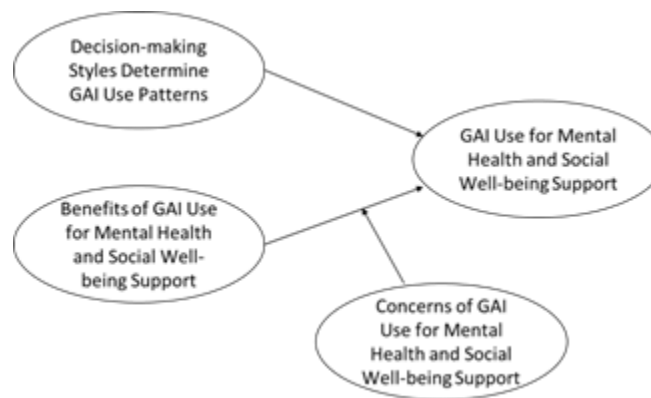
[Question: Why do you have such a strong opposition to using GAI for mental health and social well-being support?] Because we have some feelings, and it should be shared with human beings, not with the machine. Machine can't replace human, [even though] human can replace machines by using their thought process. [I regard those feelings and thoughts as something that is privileged to human, not to AI]

Overall, there is a strong theme of opposing GAI use for mental health and social well-being support because the recommendations are too general and not 'human' enough. This is supported by prior studies that suggest that human-AI interactions often lack the empathy that characterizes human-human interactions (Belanche et al., 2024).

Discussion & Conclusion

As GAI tools become more pervasive in daily lives, many users have used them for mental health and social well-being support (Jargon, 2025). While their usage has benefits, they also have potential issues that can negatively impact users. In this exploratory study, we explore the factors that drive the GAI use for mental health and social well-being support. Through twelve interviews, we identify groups of factors: benefits of GAI use, decision-making styles, and concerns for GAI use. Their relationships are captured in a conceptual framework in Figure 2. In this framework, the concerns for GAI become the moderator between the benefits of GAI use and the outcome, GAI use for mental health and social well-being support, while decision-making styles play a direct role in determining whether a user will use GAI for mental health and social well-being support. Our findings and conceptual framework contribute to a growing literature on GAI use for mental health and social well-being support. Particularly, we propose that the decision-making styles of the users is the underlying mechanism that determines whether a user would use GAI for mental health and social well-being support. This explanation is parallel to the more established mechanism, which involves a cost-benefit consideration of GAI use (Lee, 2025). Thus, our model suggests that the reasoning for GAI use is activated at a deeper psychological level than attitudes or beliefs.

Figure 2: Proposed Theoretical Framework



The study has several limitations that offer future research opportunities. First, our study is qualitative in nature and therefore has limited generalization. Future studies are needed to empirically test our model using quantitative approaches such as survey-based studies or experimental designs to validate the relationships between decision-making styles, benefits, concerns, and GAI usage for mental health support. Longitudinal studies would be particularly valuable to understand how these relationships evolve over time and whether sustained usage patterns differ from initial adoption decisions. Second, our interviewees consist of mostly young users, and future studies can incorporate users from diverse demographics (e.g., age, race, socioeconomic status, cultural backgrounds) to enrich the findings here. Cross-cultural research could reveal how cultural values and mental health stigma influence GAI adoption patterns across different societies. Additionally, investigating vulnerable populations such as elderly users, individuals with chronic mental health conditions, or those with limited digital literacy could provide crucial insights for inclusive design and ethical considerations.

Future research should also explore several emerging areas. First, the effectiveness and safety of GAI tools for mental health support warrant rigorous evaluation through randomized controlled trials comparing GAI interventions with traditional therapy, specialized mental health apps, and control conditions. Second, the development of hybrid models combining GAI tools with human oversight or integration with professional mental health services presents promising research avenues. Third, investigating the optimal design features for GAI tools

used in mental health contexts, including personalization algorithms, conversation flow patterns, and safety mechanisms for crisis detection, could inform evidence-based development practices. Another aspect is to examine the ethical implications of GAI use for mental health support, which is urgently needed. This includes studies on data privacy concerns, informed consent processes, liability issues when GAI provides harmful advice, and the potential for GAI to replace rather than complement professional mental health services. Regulatory and policy research could explore frameworks for governing GAI tools used in healthcare contexts. From a technological perspective, future studies could investigate advanced GAI capabilities such as multimodal interactions (voice, visual, haptic feedback), real-time emotion recognition, and integration with wearable devices for continuous mental health monitoring.

Finally, interdisciplinary collaboration between computer scientists, psychologists, psychiatrists, ethicists, and policymakers will be essential to address the complex challenges and opportunities presented by GAI tools in mental health contexts. Research examining implementation strategies in clinical settings, training programs for healthcare providers, and public health implications of widespread GAI adoption for mental health support could inform evidence-based practices and policies. Nevertheless, our findings explore an important and growing use of GAI tools, that is, for mental health and social well-being support. We encourage future studies to explore this area as it has many implications for various disciplines, including psychology, human-computer interaction, health informatics, digital therapeutics, and public policy. The rapid evolution of GAI technology and its increasing integration into healthcare ecosystems make this research area both timely and critical for ensuring safe, effective, and equitable mental health support for diverse populations.

References

- Ahmad, R., Siemon, D., Gnewuch, U., & Robra-Bissantz, S. (2022). Designing Personality-Adaptive Conversational Agents for Mental Health Care. *Information Systems Frontiers*, 24(3), 923-943.
- Corbin, J., & Strauss, A. (2008). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (3th ed.). SAGE Publications, Inc.
- De Freitas, J., Uğuralp, A. K., Oğuz-Uğuralp, Z., & Puntoni, S. (2022). Chatbots and Mental Health: Insights Into The Safety Of Generative AI. *Journal of Consumer Psychology*, 00(Oct), 1-11.
- Belanche, D., Belk, R. W., Casaló, L. V., & Flavián, C. (2024). The Dark Side Of Artificial Intelligence In Services. *The Service Industries Journal*, 44(3-4), 149-172.
- Chen, C., Ding Tian, A., & Jiang, R. (2024). When Post Hoc Explanation Knocks: Consumer Responses to Explainable AI Recommendations. *Journal of interactive marketing*, 59(3), 234-250.
- Chen, Q., Yin, C., & Gong, Y. (2023). Would an AI chatbot persuade you: an empirical answer from the elaboration likelihood model. *Information Technology & People*.

- Dodeja, L., Tambwekar, P., Hedlund-Botti, E., & Gombolay, M. (2024). Towards the design of user-centric strategy recommendation systems for collaborative Human–AI tasks. *International Journal of Human - Computer Studies*, 184.
- Gaczek, P., Pozharliev, R., Leszczyn'ski, G., & Zielin'ski, M. (2023). Overcoming Consumer Resistance to AI in General Health Care. *Journal of interactive marketing*, 58(2-3), 321-338.
- Jargon, J. (2025). ChatGPT Admits to Ignore Signs of Psychological Distress: 'I Failed'. *Wall Street Journal*.
<https://www.wsj.com/tech/ai/chatgpt-chatbot-psychology-manic-episodes-57452d14?mod=djemTECH>
- Jin, F., & Zhang, X. (2023). Artificial intelligence or human: when and why consumers prefer AI recommendations. *Information Technology & People*.
- Kim, J., Giroux, M., & C. Lee, J. (2021). When do you trust AI? The effect of number presentation detail on consumer trust and acceptance of AI recommendations. *Psychology & marketing*, 38(7), 1140-1158.
- Lee, I. (2025). Generative Artificial Intelligence: Project Valuation. *IT Professional*, 27(2), 42-47.
- Longoni, C., & Cian, L. (2022). Artificial Intelligence in Utilitarian vs. Hedonic Contexts: The “Word-of-Machine” Effect. *Journal of Marketing*, 86(1), 91-108.
- Moriuchi, E. (2025). Comparing and Contrasting the Technological and Psychological Factors of Virtual AI Usage in Mental Health Care Services between Providers and Patients: A Structural Equation Modeling Approach. *Journal of Technology in Behavioral Science*, 1-12.
- Song, Y., Cui, M., Wan, F., Yu, Z., & Jiang, J. (2025). AI Hallucination in Crisis Self-Rescue Scenarios: The Impact on AI Service Evaluation and the Mitigating Effect of Human Expert Advice. *International Journal of Human–Computer Interaction*, 1-21.
- Qiu, L., & Benbasat, I. (2009). Evaluating Anthropomorphic Product Recommendation Agents: A Social Relationship Perspective to Designing Information Systems. *Journal of management information systems*, 25(4), 145-181.

Wu, W., Huang, Y., & Qian, L. (2024). Social trust and algorithmic equity: The societal perspectives of users' intention to interact with algorithm recommendation systems. *Decision Support Systems*, 178.

SESSION 24.5: FROM TINY FOOTPRINTS TO LASTING LOYALTIES

Moderators:

Monika Rawal

Summary Brief

Anti-Consumption Across Cultures: Individual Choices and Collective Outcomes for Consumer Well-Being

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Prior research links anti-consumption behaviors - such as voluntary simplicity, minimalism, and brand avoidance - to enhanced individual well-being through reduced stress, increased mindfulness, and value-congruent living. However, the broader implications of anti-consumption for group well-being remain underexplored, particularly across different cultures. This study investigates how anti-consumption behaviors influence well-being in both individualist and collectivist societies. We propose that individualist cultures emphasize personal fulfillment and authenticity through anti-consumption, whereas collectivist cultures may emphasize group harmony and social responsibility. By examining voluntary simplicity, minimalism, and brand avoidance across individualistic and collectivistic cultures, this research aims to clarify the psychological and social outcomes of anti-consumption and explore whether cultural orientation moderates its effects on individual and group well-being. The findings will contribute to both consumer behavior and cross-cultural literature by offering a more holistic understanding of the consequences of consuming less.

Introduction

In an era dominated by consumerism, anti-consumption has emerged as a countermovement emphasizing reduced material consumption, sustainability, and ethical consumer choices (Chatzidakis & Lee, 2013). Anti-consumption behaviors, such as voluntary simplicity, minimalism, and brand avoidance, are often linked to individual well-being, as they reduce financial stress, promote mindfulness, and encourage meaningful consumption (Iyer & Muncy, 2009). However, the broader impact of anti-consumption on group well-being remains underexplored, particularly when considering cultural differences between individualist and collectivist societies.

Individualist cultures, such as that in the United States, prioritize personal autonomy and self-expression, often framing anti-consumption as a means of self-improvement and personal fulfillment (Schwartz, 1990). In these societies, individuals may engage in anti-consumption to achieve higher life satisfaction, reduce stress, and align their behaviors with personal values (Sheth, Sethia, & Srinivas, 2011). The well-being benefits in these contexts tend to be more focused on subjective happiness and personal growth rather than social belonging (Richins & Dawson, 1992). Conversely, in collectivist cultures, such as those in East Asia and Latin America, decisions about consumption and lifestyle are more deeply embedded in social relationships and group harmony (Triandis, 2004). Anti-consumption in collectivist societies may be practiced not only for personal well-being but also for the well-being of the family, community, or nation (Zhao & Wei, 2019). This group-oriented perspective can create stronger social bonds and shared purpose, enhancing collective well-being. However, tensions may arise when anti-consumption behaviors deviate from societal norms, leading to potential social exclusion or conflict within groups (Kim & Drolet, 2003).

Despite these cultural distinctions, little research has examined how anti-consumption simultaneously affects both individual and group well-being across different cultural contexts. This study seeks to fill this gap by investigating whether the adoption of anti-consumption behaviors in individualist and collectivist cultures leads to positive well-being outcomes for both individuals and their social groups.

Literature Review

Anti-Consumption Behavior

Anti-consumption refers to actions that reject, reduce, or avoid consumption, often as a conscious response to materialism, environmental concerns, or personal values (Chatzidakis & Lee, 2013). Quantitative studies have

identified several key dimensions of anti-consumption, such as voluntary simplicity, which reflects intentional lifestyle choices to live with less (Iyer & Muncy, 2009); minimalism, defined as a preference for fewer material possessions and a focus on meaningful experiences (Lastovicka & Fernandez, 2005); and brand avoidance, the deliberate rejection of brands based on symbolic incongruence, ethical concerns, or negative experiences (Lee, Motion, & Conroy, 2009).

Anti-Consumption for Individual and Group Well-Being

Several quantitative studies have explored how anti-consumption behaviors influence individual psychological outcomes. For instance, Sheth, Sethia, and Srinivas (2011) link mindful consumption—a closely related concept—to reduced stress and increased life satisfaction. Similarly, Kasser and Ahuvia (2002) argue that distancing oneself from materialistic values enhances subjective well-being. Iyer and Muncy (2009) find that voluntary simplicity is associated with higher levels of perceived control and psychological well-being. These findings are supported by empirical data showing that individuals who consciously reduce consumption report better mental health, more life meaning, and greater alignment with personal values (Richins & Dawson, 1992; Hurst et al., 2013).

While individual benefits have been extensively studied, research on group well-being as a function of anti-consumption is sparse. However, emerging quantitative studies suggest that collective actions rooted in ethical consumption or sustainability, often overlapping with anti-consumption, can foster social cohesion (Lorenzen, 2012). For example, Nguyen et al. (2020) found that sustainable consumption behaviors were positively associated with prosocial attitudes and community engagement, particularly when framed as socially responsible acts. These findings point toward a potential pathway from individual behaviors to collective well-being outcomes.

Cultural Moderators: Individualism vs. Collectivism

Culture significantly shapes motivations and consequences of anti-consumption behaviors. In individualist societies, consumers are more likely to engage in anti-consumption for personal growth, authenticity, or stress reduction (Triandis, 1989; Rich et al., 2017; Richins & Dawson, 1992). Quantitative studies in Western contexts show strong links between personal values (e.g., autonomy, self-actualization) and anti-consumption choices (Pepper, Jackson, & Uzzell, 2009).

In contrast, collectivist cultures emphasize social harmony, duty to others, and conformity to group norms (Hofstede, 2011). Zhao and Wei (2019), using a large-scale Chinese sample, found that anti-consumption practices were often motivated by collective concerns, such as family welfare and national sustainability. However, they also reported that such practices could result in social friction if they deviate from consumption-driven norms, highlighting the complex social consequences in these settings. Empirical research by Kim and Drolet (2003) demonstrated that in collectivist cultures, prosocial behavior—including consumption restraint—was more strongly predicted by perceived group benefits than by personal ones, suggesting a different psychological mechanism at work.

While the existing literature provides strong empirical support for the individual well-being benefits of anti-consumption, particularly in Western, individualist contexts; research on group well-being outcomes and cultural differences is fragmented. This study addresses these gaps by examining how anti-consumption behaviors influence both individual and group well-being across cultural orientations using a comparative, quantitative framework.

Proposed Methodology

Participants will be recruited from two culturally distinct countries representing individualist and collectivist orientations: the United States (individualist) and India (collectivist), based on Hofstede's cultural dimensions and prior literature (Triandis, 2004; Hofstede, 2011). A target sample of at least 300 participants per country (total N = 600) will be surveyed using Prolific. The following scales will be validated and adapted to the context for the current study:

Anti-consumption behaviors: voluntary simplicity will be measured using Iyer and Muncy (2009); brand avoidance will be measured using Lee, Motion, and Conroy (2009); and minimalism (Lastovicka & Fernandez, 2005) will be measured using Lastovicka et al. (1999). Individual well-being will be measured using the Satisfaction with Life Scale (Diener et al., 1985) and Perceived Stress Scale (Cohen et al., 1983) and group well-being will be measured based on community belonging, shared purpose, and interpersonal harmony (adapted from

Keyes, 1998; Kim & Drolet, 2003). Cultural orientation will be measured using the individualism–collectivism scale by Triandis and Gelfand (1998).

References

Chatzidakis, A., & Lee, M. S. (2013). Anti-consumption as the study of reasons against. *Journal of Macromarketing*, 33(3), 190-203.

Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture*, 2(1), 8.

Hurst, M., Dittmar, H., Bond, R., & Kasser, T. (2013). The relationship between materialistic values and environmental attitudes and behaviors: A meta-analysis. *Journal of Environmental Psychology*, 36, 257-269.

Iyer, R., & Muncy, J. A. (2009). Purpose and object of anti-consumption. *Journal of Business Research*, 62(2), 160-168.

Kasser, T., & Ahuvia, A. (2002). Materialistic values and well-being in business students. *European journal of social psychology*, 32(1), 137-146.

Kim, H. S., & Drolet, A. (2003). Choice and self-expression: A cultural analysis of variety-seeking. *Journal of Personality and Social Psychology*, 85(2), 373.

Lastovicka, J. L., Bettencourt, L. A., Hughner, R. S., & Kuntze, R. J. (1999). Lifestyle of the tight and frugal: Theory and measurement. *Journal of Consumer Research*, 26(1), 85-98.

Lee, M. S., Motion, J., & Conroy, D. (2009). Anti-consumption and brand avoidance. *Journal of Business Research*, 62(2), 169-180.

Lorenzen, J. A. (2012, March). Going Green: the process of lifestyle change 1. In *Sociological Forum* (Vol. 27, No. 1, pp. 94-116). Oxford, UK: Blackwell Publishing Ltd.

- Nguyen, N., & Johnson, L. W. (2020). Consumer behaviour and environmental sustainability. *Journal of Consumer Behaviour*, 19(6), 539-541.
- Pepper, M., Jackson, T., & Uzzell, D. (2009). An examination of the values that motivate socially conscious and frugal consumer behaviours. *International journal of consumer studies*, 33(2), 126-136.
- Revicki, D. A., Leidy, N. K., & Howland, L. (1996). Evaluating the psychometric characteristics of the Psychological General Well-Being Index with a new response scale. *Quality of Life Research*, 5(4), 419-425.
- Rich, S. A., Hanna, S., Wright, B. J., & Bennett, P. C. (2017). Fact or fable: Increased wellbeing in voluntary simplicity. *International Journal of Wellbeing*, 7(2).
- Richins, M. L., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research*, 19(3), 303-316.
- Schwartz, S. H. (1990). Individualism-collectivism: Critique and proposed refinements. *Journal of Cross-cultural Psychology*, 21(2), 139-157.
- Sheth, J. N., Sethia, N. K., & Srinivas, S. (2011). Mindful consumption: A customer-centric approach to sustainability. *Journal of the Academy of Marketing Science*, 39, 21-39.
- Triandis, H. C. (2004). The many dimensions of culture. *Academy of Management Perspectives*, 18(1), 88-93.
- Triandis, H. C., & Gelfand, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of personality and social psychology*, 74(1), 118.
- Zhao, C., & Wei, H. (2019). The highest hierarchy of consumption: A literature review of consumer well-being. *Open Journal of Social Sciences*, 7(4), 135-149.

Full Paper

Tiny Houses, Big Shifts: Overcoming Societal Norms for Sustainable Living

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This ethnographic study examines the Tiny House Movement as a site of cultural and structural change in consumer values, using Giddens' (1984) structuration theory. Drawing on interviews with 50 owners and 15 builders across 22 U.S. states, the research explores how tiny house living redefines success, challenges consumerist norms, and promotes sustainability. Findings reveal transformations at three levels: micro (individuals prioritizing experiences, mobility, and financial independence over possessions), meso (social networks that both challenge and reinforce minimalist values), and macro (structural barriers such as restrictive zoning laws and housing regulations). Tiny house dwellers actively resist and reshape norms around homeownership, consumption, and environmental responsibility, illustrating the reciprocal influence of agency and structure. The study extends structuration theory to incorporate ecological and systemic dimensions, offering implications for marketers to align with shifting consumer priorities toward minimalism, autonomy, and sustainable living.

Introduction

Housing in the United States has been a persistent issue since the Great Depression, with individuals consistently seeking affordable and practical housing solutions (Time Magazine, 2020). One such solution is the tiny home, typically under 500 square feet, designed for space efficiency and often embraced for its eco-friendly features, such as reduced electricity usage, water consumption, and carbon emissions (Mitchell, 2014). While financial savings are often cited as a key motivation, the Tiny House Movement reflects a deeper desire for a simpler lifestyle, greater mobility, and a stronger connection to the environment (Mitchell, 2014). Many individuals are overwhelmed by the financial and emotional burdens of conventional housing—mortgages, property taxes, and maintenance costs—prompting a shift toward minimalism and intentional living (Weetman, 2018).

The Tiny House Movement also responds to a cultural shift away from consumerism and material accumulation, with tiny homes challenging the assumption that bigger is always better. This trend is fueled in part by social media and popular culture, which have popularized tiny homes through shows like *Tiny House Nation*, presenting the lifestyle as both aspirational and attainable (HGTV.com, 2024). This portrayal has shifted perceptions, particularly among younger generations, from seeing tiny homes as fringe alternatives to legitimate and desirable housing options.

At its core, consumers of the Tiny House Movement represent a shift toward sustainability and intentional living, aligning with broader cultural changes in response to growing environmental and economic concerns (Peterson & Lunde, 2016). This movement actively challenges societal norms of excessive consumption, homeownership ideals, and status through material wealth, promoting a redefined sense of success (Brown, Dowlatabadi, & Cole, 2009; Kollmuss & Agyeman, 2010). As individuals increasingly opt for smaller, more sustainable homes, they embody a rejection of consumerist values, advocating for a lifestyle that prioritizes environmental responsibility over traditional measures of success (White, Habib, & Hardisty, 2020).

Efforts to promote sustainable consumption have long focused on influencing individual behavior through education, incentives, and structural supports (Brown, Dowlatabadi, & Cole, 2009; Kollmuss & Agyeman, 2010; White, Habib, & Hardisty, 2020). However, these strategies often view consumers as passive recipients of influence, neglecting the active role individuals play in resisting and reshaping societal norms. The Brundtland Commission (1987) and the Oslo Roundtable (1994) emphasized the importance of a cultural shift towards more intentional, value-driven living, requiring individuals to push against ingrained social expectations, such as the normalization of excess and homeownership as a symbol of success.

The rise of the tiny home movement illustrates a broader societal shift towards sustainability, minimalism, and intentional living. This shift challenges traditional norms surrounding homeownership and material wealth, inviting further exploration into how these cultural and societal changes are influencing housing choices and the evolving definition of the American Dream. For the rest of the paper, we will discuss the theoretical background: structuration theory, followed by the context, methods, findings, and conclusions.

Theoretical Background & Context

This study draws on Giddens' (1984) structuration theory to explore how some of the most committed sustainable consumers—tiny house dwellers—reconfigure their everyday routines within and against these norms. Routines, while seemingly mundane, are embedded with meaning and shaped through ongoing interactions between personal agency and social structure (Shove 2004; Wahlen 2011; Phipps and Ozanne 2017). Through ethnographic fieldwork with 50 tiny house owners and 15 builders, I observed how individuals restructured their lives—physically, emotionally, and socially—to align with more sustainable values.

Tiny house living demands not only material downsizing but also a departure from mainstream expectations about success, space, and lifestyle. In this way, sustainability emerges not simply through eco-friendly behavior, but through the active renegotiation of what is considered “normal.” Participants didn't just adopt green practices—they redefined comfort, convenience, and aspiration itself. The homes and their surrounding contexts acted as both constraints and catalysts, prompting consumers to transform unsustainable habits into routines that aligned with their evolving values.

By focusing on the micro-level transformations of these individuals, this study shows how sustainable routines are not passively adopted but actively constructed, often in tension with, and sometimes in opposition to, prevailing social norms. Structuration theory helps capture this dual movement: how individuals are shaped by societal expectations while also reshaping those expectations through their everyday actions.

This study examines individuals within the Tiny House Movement, a growing cultural shift toward minimalist and sustainable living (Mitchell, 2014). In the U.S., more than 65 builders now produce thousands of tiny homes annually (Tiny House Builders, 2017), reflecting rising consumer demand for sustainable products and lifestyles (Peterson & Lunde, 2016). Events like Hurricane Katrina (Heavens, 2007) and the Great Recession (Brenoff, 2012) further accelerated the movement, alongside media exposure from shows like *Tiny House Hunters* and *Tiny House Big Living* (HGTV.com, 2017).

Tiny house residents aren't rejecting the American Dream but reimagining it (Cullen, 2004). Typically ranging from 100 to 400 square feet (Mitchell, 2009), tiny houses require residents to reduce possessions by about 75% (Mitchell, 2014). This process illustrates how physical constraints and intentional dispossession jointly restructure consumption habits. As consumers internalize these practices, their values shift, contributing to broader societal change through everyday action.

Methodology

Over 18 months, the first author conducted data collection for this ethnographic research project. Ethnography involves the detailed description and interpretation of the shared and socially learned behaviors, beliefs, language, and values within a group united by culture (Creswell, 2013). This study adopted a meso-level ethnographic framework, as outlined by Arnould and Price (2006), to explore the lived experiences of consumers within markets focused on consumer needs (p. 251). The primary aim was to generate “thick descriptions” (Fetterman, 2010) of individuals living in tiny houses, to examine how their values evolved through this lifestyle shift.

The data collection consisted of semi-structured interviews with 50 individuals who either live in or are transitioning to living in tiny houses. These interviews, lasting between 39 and 90 minutes with an average of approximately 56 minutes, were conducted in person, via Skype, or over the phone. Sampling continued until data saturation was achieved, at which point recurring ideas and patterns became evident (Merriam, 2009). Each interview was recorded and transcribed, resulting in 834 single-spaced pages of data. To maintain anonymity, all participants were given pseudonyms. As detailed in Table 1, the sample included participants from 22 U.S. states: 33 were female and 17 were male. While 44 participants were already residing in tiny houses, six were in the process of

downsizing. Participant ages ranged from 18 to 68, with a mean age of 41.3. Each participant's pseudonym and age are provided alongside their quotations.

Data analysis was conducted manually using a hermeneutical approach to qualitative research (Campbell & Lassiter, 2015; Thompson, 1997), which encourages the emergence, refinement, and extension of interpretive categories and themes (Saaticioglu & Corus, 2014, p. 125). This process involved an iterative cycle of reading and coding, enabling insights into how broader societal forces interact with personal motivations to influence the relinquishment of material possessions among tiny house dwellers (Thompson, 1997). In the initial phase, the authors generated over 100 individual codes from the transcripts. These were then grouped and refined into broader themes (Fischer & Otnes, 2006). In the final stage, I examined these themes within a macro-level cultural context to interpret participants' lived experiences (Bazeley, 2013).

Table 1. Demographic Information of Research Study Participants

Participants* (Pseudonym)	Age**	Gender	State of Residence	Professional Background	Consumer or Producer	Months of Occupancy or Practice
Tiny House Owners (Consumers)						
Emma	62	F	Minnesota	Self-employed	C	48
Daniel	30	M	Minnesota	Business owner	C	29
Rachel	28	F	Minnesota	Self-employed	C	8
Jim	31	M	Wyoming	Educator	C	24
Suzanne	26	F	Wyoming	Student	C	24
Iris	38	F	Georgia	Military	C	46
Christian	33	M	Vermont	Author/Designer	C	42
Karly	27	F	Oregon	Designer	C	32
Amber	59	F	Virginia	Author/Designer	C	48
Peter	63	M	Virginia	Designer	C	48
Sondra	56	F	North Carolina	Retired	C	32
Alexandria	44	F	West Virginia	Management	C	41
Erik	62	M	Hawaii	Retired	C	36
Molly	28	F	Tennessee	Religion	C	32
Cassie	58	F	Georgia	Retired	C	36
Courtney	20	F	Ohio	Student	C	10
Erin	57	F	Kansas	Retired	C	48
Gina	57	F	Florida	CEO	C	48
Janet	48	F	Minnesota	Business owner	C	32
Lorie	44	F	Maine	Journalism/PR	C	40
Megan	28	F	Florida	Management	C	36
Adam	58	M	Ohio	Retired	C	24
Paula	62	F	Massachusetts	Educator	C	18
David	32	M	Texas	Research	C	48
Lee	28	M	Georgia	Technician	C	16
Kathleen	54	F	Hawaii	Management	C	18
Seth	59	M	Ohio	Service provider	C	29
Ali	39	F	Texas	Real estate	C	26
Barbara	58	F	South Carolina	Chef	C	8
Josh	36	M	Florida	Technician	C	31
Angie	35	F	Florida	Management	C	31
Karl	35	M	Washington	Journalism/PR	C	24
Emily	25	F	Washington	Journalism/PR	C	24
Carolyn	32	F	Colorado	Management	C	8
Martin	45	M	Vermont	Service provider	C	32
Jennifer	51	F	Florida	Service provider	C	36
Michael	38	M	North Carolina	Engineer	C	48
Carrie	56	F	Florida	Management	C	18
Diego	62	M	Indiana	Management	C	6
Anna	56	F	Georgia	Management	C	6
Candace	29	F	Illinois	Service provider	C	14
Nick	25	M	South Carolina	Firefighter	C	6
Julie	64	F	Florida	Real estate	C	48
Ruth	18	F	Texas	Student	C	6
Samantha	27	F	Texas	Management	C	36
Robert	29	M	Texas	Management	C	39
Brittany	24	F	Tennessee	Service provider	C	18
Jared	44	M	Colorado	Service provider	C	48
Tina	29	F	Wyoming	Service provider	C	15
Chelsea	20	F	Oklahoma	Student	C	6

Findings

After conducting qualitative data analysis, three thematic findings emerged.

1. Micro Consumer Traditions and Societal Norms

At the micro level, the Tiny Home Movement reflects a profound shift in consumer behavior, emphasizing a rejection of traditional societal norms associated with homeownership. As individuals increasingly prioritize personal values such as financial independence, mobility, and sustainability, they challenge the long-standing association between homeownership and success in the United States. Instead of aspiring to own large homes, many consumers are choosing to downsize to gain greater freedom and flexibility, which allows them to reallocate resources—both time and money—toward personal experiences and fulfillment. For instance, one participant noted, “The things that I want are not material. I would rather have experiences than stuff” (Chelsea, age 20). This emphasis on experiential living over material accumulation highlights a broader shift in consumer priorities.

Brittany (age 24) reflects on how her views evolved from a desire for more space and status, saying, “We had just bought our 2,000 square foot house... We just kept increasing the size... My own views changed... from going, ‘We need to increase our budget about \$30,000 so we can afford a formal dining room,’ to ‘Obviously, none of that matters and I couldn't care less.’” These personal narratives illustrate the changing dynamics of consumer choices at the micro level, wherein individuals redefine success not in terms of material wealth but in terms of quality of life, intentional living, and personal well-being. Individual decisions like these show how deeply held consumer traditions can evolve. Rather than conforming to a fixed lifestyle, tiny home owners are reshaping what it means to live well by emphasizing intentional living, mobility, and simplicity.

2. Meso Consumer Traditions and Societal Norms

At the meso level, consumer behaviors and norms are heavily influenced by the immediate social environment, including friends, family, and local communities. In the case of tiny home dwellers, these external influences often challenge and misunderstand their values and decisions. A common reaction from social circles is the assumption that choosing a minimalist lifestyle signals financial hardship or social decline. As one participant shared, “Our friends immediately assume that we're poor. That was a big personality hit, especially on a woman's ego, those types of things. All of my friends are like, ‘Do you need me to buy you food?’ I'm like, ‘No, I'm not poor. I just choose to live this way.’” (Samantha, age 27). This response reflects how ingrained consumer norms within social networks can create pressure to conform to traditional expectations, such as owning a large home or regularly purchasing new items.

Despite such pressures, many tiny homeowners actively resist the impulse to consume in ways that align with conventional practices. They often repurpose or recycle materials, emphasizing sustainability and thoughtful consumption over the desire for newness. As one participant expressed, “We got it either cheap or free. When it comes to consuming, the answer is kind of 50-50. We splurge on the right things, not those occasional things.” (Josh, age 36). This resistance highlights how meso-level influences, while powerful, are not enough to deter individuals from living by their values of sustainability, simplicity, and intentional consumption.

3. Macro Consumer Traditions and Societal Norms

At the macro level, the Tiny Home Movement is a direct response to broader societal issues, including outdated zoning laws, rigid financial institutions, and environmental concerns. Although individuals may initially be drawn to tiny homes for personal reasons such as simplicity and financial independence, their collective actions signal a larger societal shift towards reimagining values around homeownership, consumption, and ecological responsibility.

One significant challenge faced by tiny homeowners is the inflexibility of housing regulations, which often fail to accommodate nontraditional forms of housing. Brittany (age 24) shared the legal struggles associated with her tiny home: “Mainly for the legality. The laws here and everywhere that we found, you can't legally have a structure less than 500 square feet. With it being on wheels, it is legally an RV in our area. You can legally have those less than 500 square feet.” This highlights the structural barriers that tiny homeowners must navigate, which reflect broader issues within the housing system. Furthermore, the definition and categorization of tiny homes often clash with existing zoning laws, as exemplified by Jared (age 44), who noted, “Yes, I'm violating the zoning laws of this particular zip code. You can't store-- they say you can't store a large trailer on your property.” Such structural

constraints reflect a larger tension between individual desires for alternative living arrangements and the rigid, institutionalized systems governing housing in the U.S.

Additionally, the Tiny Home Movement addresses growing concerns about the environmental impact of consumer consumption and resource use. As Ruth (age 18) expressed, “That you might not realize how bad it is for the planet... Then we may come to a point in 40 to 50 years where the trees aren’t producing anymore and the non-renewable resources that we’re using dry up.” The movement highlights an increasing societal awareness of the environmental consequences of unchecked consumption. Tiny homeowners, by opting for smaller, more sustainable living spaces, are part of a larger cultural critique of the consumer-driven, resource-intensive model of traditional homeownership. Their choices signal a broader societal shift away from material excess toward greater ecological responsibility and sustainable living practices.

Discussion

The findings from this study reveal a significant transformation in consumer values, driven by financial, lifestyle, and environmental factors, which have contributed to the growing popularity of the Tiny House Movement. This shift in values is aligned with broader societal changes, wherein individuals increasingly challenge traditional consumerist norms and reframe the concept of success. Traditionally, success in the United States has been associated with material wealth, homeownership, and the accumulation of possessions, often framed within the context of the “American Dream” (Brown, Dowlatabadi, & Cole, 2009). However, for the Tiny House Movement’s participants, success is no longer defined by the size of one’s home or the amount of material goods one owns but by the ability to live simply, sustainably, and independently.

This redefinition of success is not merely a personal shift but also represents a larger critique of consumerism. As individuals opt for smaller living spaces, they are not only addressing personal financial concerns but also contributing to a societal shift toward minimalism and intentional living. Many participants reported a desire to achieve financial freedom by minimizing expenses and reducing debt. As Ali (age 39) shared, her decision to downsize to a tiny home allowed her to “free up” finances, eliminating debt and giving her more disposable income: “I was working so hard, [...] and I barely paid the bills. [...] Now I have money in my account. I feel like I’ve freed up, I have like zero debt. [...] It’s because I went tiny and I don’t pay as many bills now.” This desire for financial independence reflects the growing trend to move away from traditional financial structures, such as large mortgages and debt, which have long been entrenched in American society. This aligns with Giddens’ (1984) structuration theory, where individual actions, such as choosing tiny homes, can challenge and reshape macro-level social structures, in this case, the structure of homeownership and financial obligations.

At all three levels—micro, meso, and macro—participants in the Tiny House Movement demonstrate how consumer behavior is being renegotiated in the face of rigid social expectations. At the micro level, individuals redefine success through intentional living and value experiences over possessions, as seen in Chelsea’s remark: “The things that I want are not material. I would rather have experiences than stuff.” At the meso level, participants encounter judgment from their social networks that often mistake minimalism for poverty, yet persist in their values, as Samantha (age 27) described: “Our friends immediately assume that we’re poor... I’m like, ‘No, I’m not poor. I just choose to live this way.’” These acts of resistance show how agents actively push back against conventional consumerism and reshape norms within their communities. At the macro level, structural barriers such as outdated zoning laws present significant obstacles, but participants still challenge institutional definitions of housing and sustainability. Brittany (age 24) shared, “The laws here and everywhere that we found, you can’t legally have a structure less than 500 square feet,” revealing how legal systems remain bound to traditional housing ideals. Yet these constraints have not stopped individuals from reimagining housing as a more flexible, sustainable, and equitable practice. In this way, the Tiny House Movement illustrates Giddens’ theory in action—individual agency interacts with and reshapes social structures, signaling a broader societal transformation toward more sustainable and intentional forms of consumption.

Theoretical and Practitioner Implications

This study offers a focused extension of Giddens’ (1984) Structuration Theory by showing how the Tiny House Movement reconfigures norms around consumption, housing, and sustainability. At the micro level, individuals resist traditional consumer values by redefining success and opting for minimalist lifestyles, demonstrating how agency can challenge and reshape dominant structures. Meso-level dynamics reveal that social networks both constrain and support these shifts, highlighting the role of interpersonal relationships in the

negotiation of new norms. At the macro level, the movement engages with legal and institutional structures, exposing tensions between emerging practices and outdated regulations. By incorporating ecological values and material constraints, this research broadens structuration theory to better account for environmental and systemic dimensions of social change.

The rise of the Tiny House Movement presents valuable insights for marketers seeking to align with shifting consumer values. As consumers increasingly prioritize sustainability, minimalism, and quality of life over material accumulation, businesses should position products and services that support these values. Marketing strategies that highlight space efficiency, durability, and environmental responsibility will resonate with consumers seeking alternatives to traditional homeownership and consumption patterns (Mitchell, 2014; Peterson & Lunde, 2016).

Additionally, marketers should reframe messaging to emphasize autonomy, well-being, and experiential living, reflecting a redefinition of the American Dream rooted in intentional living rather than status or accumulation (White, Habib, & Hardisty, 2020). Finally, recognizing the role of social context, businesses can foster community through initiatives like DIY workshops or sustainable product lines that legitimize and support minimalist choices (Brown, Dowlatabadi, & Cole, 2009). In doing so, marketers not only meet consumer demand but also contribute to a broader cultural shift toward sustainable consumption.

References

- Arnould, Eric J. and Linda L. Price (2006), "Market-Oriented Ethnography Revisited," *Journal of Advertising Research*, 46(3), 251-262.
- Bazeley, Pat (2013), *Qualitative Data Analysis: Practical Strategies*, Thousand Oaks, CA: SAGE Publications.
- Brenoff, Ann (2012), "Tiny Houses, Big Trend," *HuffPost*, Retrieved from http://www.huffpost.com/entry/tiny-houses-big-trend_n_1763942.
- Brown, Halina Szejnwald, Hadi Dowlatabadi and Raymond J. Cole (2009), "Sustainable Consumption and Production: An Effort to Reconcile the Dichotomy," *Sustainability: Science, Practice and Policy*, 5(2), 21-30.
- Campbell, Elizabeth and Luke Eric Lassiter (2015), *Doing Ethnography Today: Theories, Methods, Exercises*, Hoboken, NJ: Wiley-Blackwell.
- Creswell, John W. (2013), *Qualitative Inquiry and Research Design: Choosing Among Five Approaches* (3rd ed.), Los Angeles, CA: SAGE Publications, Inc.

Cullen, Jim (2004), *The American Dream: A Short History of an Idea that Shaped a Nation*, New York, NY: Oxford University Press.

Fetterman, David M. (2010), *Ethnography: Step-by-Step* (3rd ed.), Thousand Oaks, CA: SAGE Publications.

Fischer, Eileen and Cele C. Otnes (2006), "Breaking New Ground: Developing Grounded Theories in Marketing and Consumer Behavior," in *Handbook of Qualitative Research Methods in Marketing*, Russell W. Belk, ed., Cheltenham, UK: Edward Elgar, 19-30.

Giddens, Anthony (1984), *The Constitution of Society: Outline of the Theory of Structuration*, Berkeley, CA: University of California Press.

Heavens, Alan L. (2007), "A Solution to Katrina Victims' Housing Woes?," *The Philadelphia Inquirer*, Retrieved from <https://www.inquirer.com>.

HGTV.com (2017), *Tiny House Hunters*, Retrieved from <https://www.hgtv.com/shows/tiny-house-hunters>.

HGTV.com (2024), *Tiny House Nation*, Retrieved from <https://www.hgtv.com/shows/tiny-house-nation>.

Kollmuss, Anja and Julian Agyeman (2010), "Mind the Gap: Why Do People Act Environmentally and What are the Barriers to Pro-Environmental Behavior?," *Environmental Education Research*, 8(3), 239-260.

Merriam, Sharan B. (2009), *Qualitative Research: A Guide to Design and Implementation*, San Francisco, CA: Jossey-Bass.

Mitchell, Ryan (2014), *Tiny House Living: Ideas for Building and Living Well in Less Than 400 Square Feet*, Cincinnati, OH: Betterway Home.

Peterson, Mark and Matt Lunde (2016), "Sustainability and Consumption: What's Next?," *Journal of Macromarketing*, 36(3), 307-309.

Phipps, Marcus and Lucie K. Ozanne (2017), "Routines Disrupted: Reestablishing Security Through Practice Alignment," *Journal of Consumer Research*, 44(2), 361-380.

Saatcioglu, Bige and Canan Corus (2014), "Poverty and (Vulnerable) Consumer Behavior: A Transformative Perspective," *Journal of Macromarketing*, 34(2), 120-134.

Shove, Elizabeth (2004), *Comfort, Cleanliness and Convenience: The Social Organization of Normality*, Oxford, UK: Berg.

Thompson, Craig J. (1997), "Interpreting Consumers: A Hermeneutical Framework for Deriving Marketing Insights from the Texts of Consumers' Consumption Stories," *Journal of Marketing Research*, 34(4), 438-455.

Time Magazine (2020), "The History of Affordable Housing in America," *Time*, Retrieved from <https://time.com>.

Tiny House Builders (2017), *Tiny House Industry Survey*, Retrieved from <https://tinyhousebuild.com>.

Wahlen, Stefan (2011), "The Routinely Forgotten Routine Character of Domestic Practices," *International Journal of Consumer Studies*, 35(5), 507-513.

Weetman, Tim (2018), *The Circular Economy: A Wealth of Flows*, Abingdon, UK: Routledge.

White, Katherine, Rishad Habib and David J. Hardisty (2019), "How to SHIFT Consumer Behaviors to Be More Sustainable: A Literature Review and Guiding Framework," *Journal of Marketing*, 83(3), 22-49.

SESSION 24.6: AUTHENTICITY, BIAS, AND MISINFORMATION IN THE SOCIAL FEED

Moderators:

Priyanka Singh

Summary Brief

Grayscale vs. Color: Consumer Response to B2B Package Labeling

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Little attention in the marketing literature has been paid to the B2B2C phenomenon, or the situation where much of a firm's sales is to an intermediary firm who goes on to serve the end consumer. A firm may deploy marketing efforts targeting a B2B customer differently from the end consumer. For example, a firm may have a utilitarian-focused branding (e.g., plain, grayscale aesthetics) and a hedonic-focused branding (e.g., colorful) targeting consumers. In such cases a spillover effect may occur in which the inconsistencies in brand messaging may have adverse effects on brand equity outcomes, such as attitudes and behaviors. In an eye tracking experiment, colorful B2B package labeling was found to bring about greater consumer attention to a sub-brand logo than grayscale B2B package labeling. However, there were no differences detected between a colorful B2B package label and a grayscale one in consumer perceptions of quality, attitudes, or attention to the umbrella brand logo or product details.

Introduction

A cursory examination of the leading brands across the globe reveals many brands that cannot be neatly classified as either B2B or B2C (e.g., Samsung, Dell, Amazon, etc.). Instead, these brands reflect an increasing shift among leading and growing firms towards a B2B2C or mixed business model strategy. Simply put, a B2B2C business model reflects a situation where much of a firm's sales is to an intermediary firm who goes on to serve the end consumer. B2B2C and mixed business models are becoming increasingly common given the levels of market, technological, and environmental turbulence that characterizes competition in both national and global marketplaces (Kumar, Lahiri, and Dogan, 2018).

Background

While branding scholars have made meaningful inroads into exploring factors that help establish and grow positive brand outcomes in B2C and B2B settings, the implications of such efforts are unclear as it pertains to B2B2C scenarios. A particular concern arises with respect to the development of utilitarian versus hedonic foundations on which to build brand equity in the more contemporary business model scenarios—is one approach more appropriate or advantageous? Alternatively, should a brand manager consider a balanced approach as the best strategy to grow brand equity? Furthermore, and potentially more important from a research inquiry perspective are the spillover effects that unfold as a result of inconsistent brand strategies in the case of mixed business models, where a firm's B2B brand and consumer-facing brand follow independent branding strategies.

The notion that a firm would pursue independent brand strategies for its business customers and individual consumers is neither novel nor surprising. In fact, prior theory and normative recommendations from scholarly research might lead managers to conclude that such an approach is best. After all, extant studies argue that B2B buyers are rational and therefore rely on utilitarian brand cues, while consumer decision making involves emotional components and therefore hedonic brand elements might influence consumption behaviors. For example, Sherwin-Williams, a Fortune 500 manufacturer of building materials, sells a line of paint products brand named Pro-Mar exclusively to contractors and homebuilders. This brand is not available for individual consumers to purchase. However, consumers can pick from other branded lines owned by Sherwin-Williams (such as Captivate) that are exclusive to the B2C side of Sherwin-Williams' paint business. Such a brand strategy is referred to as portfolio branding (Voss and Mohan, 2016), where a firm manages a portfolio of individually unique product brands.

The question remains whether such approaches to brand strategy (i.e., portfolio branding) are useful in building brand equity. In this regard, the issue is one that is primarily related to the unintended adverse spillover effects that potentially unfold when inconsistent brand strategies are employed in B2B2C contexts.

The current research examines spillover effects of portfolio branding strategies in B2B2C, specifically effects on individual consumer responses. To accomplish this objective, an eye tracking experiment provides some insight into whether the use of color, a hedonic product label characteristic, brings about differing consumer responses to a B2B targeted product.

Method

A one-factor (colorful versus grayscale) eye-tracking experiment was conducted with adult, U.S. consumers. Participants were recruited from a list of local residents procured by a behavioral research lab at a mid-Atlantic university. Participants were told that a contractor had finished painting a room in their home to their satisfaction and that the contractor left a left-over can of paint at their home. The participant was presented with an image of the left-over can of paint and was told to view the image, just because they were curious. Participants viewed either a colorful labeled version of a B2B-targeted can of paint or a grayscale version, with both versions identical except for use of color on the labels. Participants' eye movements were tracked as they viewed the paint can. After the stimulus was presented, dependent (i.e., perceived product quality) and classification items were collected in a self-reported survey.

Key Findings

Seventy-two adult consumers participated in the study. The typical respondent was white (58%), female (68%), and reported an income of \$100,000-149,999 (29%).

The use of color was not found to bring about greater perceptions of product quality ($t = -.12$, $df = 69$, $p = .45$, $M_{gray} = 4.11$, $color = 4.14$). To measure attention to specific packaging label elements, areas of interest were identified on the labels highlighted each: umbrella brand logo, product details, and sub-brand logo. Then, eye tracking fixation duration for each of the three label elements was calculated. Independent sample t tests were conducted to identify statistically significant differences of the fixation duration means for the colorful version versus the grayscale version. Attention to umbrella brand logo ($t = -.85$, $df = 61$, $p = .466$, $M_{gray} = 1.13$, $M_{color} = 1.15$), and attention to product details ($t = -.762$, $df = 65$, $p = .224$, $M_{gray} = 4.68$, $M_{color} = 5.38$), were both not supported. However, attention to sub-brand logo was supported ($t = -1.760$, $df = 55.7$, $p = .041$, $M_{gray} = 1.79$, $M_{color} = 2.40$).

Discussion

Our findings suggest that consumers do not see a difference in perceived quality when a B2B product packaging label is colorful or grayscale. Also, consumer attention to the umbrella brand logo and to the product detail information on a B2B packaging label is not affected if the label is colorful or grayscale. This suggests to product packaging designers that there is no need to pay for additional colorant to make a B2B label colorful, when considering the spillover effects on consumers. The caveat to this conclusion is regarding attention to a sub-brand logo on the package. Our results indicate that consumer attention to the sub-brand logo is greater when the label is colorful than when grayscale. Thus, if the objective is to attract consumer attention to the sub-brand logo, then the label should be in color. For example, if a manufacturer is deploying a pull promotion strategy where they want to influence the consumer to request contractors use a specific sub-brand of paint, they may consider using a colorful label. The colorful label may catch the consumer's attention, and subsequently may motivate the consumer to request the sub-brand from the contractor for their next home improvement project.

References

- Kumar, V., Lahiri, A., & Dogan, O. B. (2018) A strategic framework for a profitable business model in the sharing economy. *Industrial Marketing Management*, 69, 147-160.
- Voss, K. E., & Mohan, M., (2016). Corporate brand effects in brand alliances. *Journal of Business Research*, 69(10), 4177-4184.

Summary Brief

Attributing Authenticity: How Influencer Type and Transgression Shape Consumer Judgments

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As virtual influencers (VIs) become increasingly integrated into digital marketing strategies, questions remain about how consumers interpret their behavior, especially compared to human influencers. Drawing on attribution theory, this research examines how influencer type (human vs. virtual) influences consumers' attributions, and how these attributions affect perceived authenticity and purchase intention. Across two experimental studies, we test a moderated serial mediation model in which influencer type affects purchase intention through attribution and authenticity, with transgression (vs. no transgression) serving as a moderator of the attribution–authenticity link. Results show that virtual influencers are perceived as less agentic and more externally controlled than human influencers, leading to lower perceived authenticity. However, when a virtual influencer commits a transgression, external attribution can serve a protective role, preserving authenticity and purchase intention. These findings highlight how attributional processes are shaped by behavioral context and offer important insights for leveraging virtual influencers in brand communications.

Introduction

Influencer marketing has become a dominant force in digital advertising, with the global market projected to reach \$32.6 billion in 2025, up from \$24 billion in 2024 (Kendall, 2025). As technology continues to reshape the digital marketing landscape, influencer strategies have expanded beyond traditional human creators to include a new kind of spokesperson: the virtual influencer (VI). VIs are CGI-based personas with curated lifestyles and strong social media presence (Thomas and Fowler, 2020). Despite their artificial nature, VIs like Lil Miquela—who has collaborated with Prada, Red Bull, and Samsung—have attracted millions of followers, including over 2.4 million on Instagram. The growing popularity and influence of these non-human spokespeople raise critical questions about how consumers perceive their behavior, particularly in contexts where authenticity is essential for persuasion.

Unlike human influencers, VIs lack personal autonomy. Their posts and endorsements are carefully scripted by creative teams, often leaving consumers to wonder who is actually responsible for the content. This distinction may influence how consumers assign causal responsibility to virtual versus human influencers, especially when their behavior is evaluated through the lens of authenticity—a key driver of engagement and purchase intention. Accordingly, this research investigates how influencer type (virtual vs. human) shapes consumers' attribution processes and how these attributions, in turn, influence perceived authenticity and purchase intention. Further, we examine whether these relationships are moderated by the presence or absence of a transgression.

Background

As VIs take on a more prominent role in brand storytelling, understanding how consumers evaluate their behavior becomes increasingly important. This research draws on attribution theory (Heider, 1958; Kelley, 1967; Weiner, 1985), which explains how individuals interpret the causes of others' behavior and assign responsibility based on whether actions are seen as internally or externally motivated. In influencer marketing contexts, consumers may view human influencers as acting on personal beliefs and choices, while seeing VIs as merely executing content produced by behind-the-scenes teams. These attributional inferences are consequential: internal attributions often strengthen perceptions of authenticity, while external attributions may weaken it—particularly for VIs who already lack perceived autonomy.

Authenticity, in turn, plays a critical role in shaping consumer responses such as purchase intention. When consumers view an influencer as genuine and self-directed, they are more likely to believe in the sincerity of the message and take action on the endorsement. However, the relationship between attribution and authenticity may not be uniform across all situations. Influencers operate in an environment where cultural expectations are constantly evolving, and consumer evaluations often occur in contexts involving value misalignment or norm violations.

One such context is transgression—defined as behavior that violates implicit or explicit norms that guide how relationships are enacted and evaluated (Metts, 1994; Wilson et al., 2024). Although VIs may appear immune to controversy due to their scripted nature, they too can be involved in public missteps. For instance, Lil Miquela has drawn criticism for participating in a staged “hacking” incident (Petrarca, 2018). These episodes—whether carefully crafted for engagement or the result of human oversight—subject VIs to the same public scrutiny and accountability that human influencers face. This study proposes that transgression acts as a moderator of the attribution–authenticity relationship. When an influencer commits a transgression, consumers may engage in causal reasoning to explain the behavior. In such cases, external attribution may help protect the influencer’s image by reducing blame and preserving authenticity. In contrast, when no transgression occurs, external attribution may suggest the influencer lacks agency or sincerity, ultimately undermining perceived authenticity. Importantly, we also consider the timing of attribution. When attribution is made after a transgression, it may reflect a motivated, compensatory response—an effort by the consumer to explain away the influencer’s misstep and protect their image. In contrast, when attribution is made before any wrongdoing occurs, it may represent a stable belief about the influencer’s level of control. These differences in attribution timing meaningfully shape how consumers interpret behavior and assess authenticity. Both transgression and attribution timing act as key boundary conditions for understanding when and how attribution influences authenticity and consumer responses.

Key Findings

This research employed a 2 (Influencer Type: human vs. virtual) $\times$ 2 (Transgression: no vs. yes) between-subjects design across two studies. In Study 1 ($N = 188$, 50% female, $M_{age} = 45.8$), attribution was measured before the transgression manipulation; in Study 2 ($N = 183$, 52% female, $M_{age} = 38.4$), it was measured afterward. Across both studies, VIs were attributed less internal and more external causality than humans. These attributions predicted authenticity, with effects moderated by transgression.

In Study 1, internal attribution more strongly predicted authenticity in the no-transgression condition ($B = .44$) than under transgression ($B = .26$), while the negative effect of external attribution on authenticity weakened with transgression ($B = -.09$, $p = .16$ vs. $-.28$, $p < .001$). Moderated serial mediation showed that influencer type indirectly affected behavioral authenticity more in the no-transgression condition (effect = $-.22$, 95% CI $[-.37, -.10]$) than with transgression (effect = $-.13$, 95% CI $[-.23, -.05]$); a similar pattern held for purchase intention, with significance only in the no-transgression condition (effect = $-.07$, 95% CI $[-.16, -.02]$; index = $.047$, 95% CI $[-.00, .11]$). In Study 2, transgression narrowed the attribution gap between VIs and humans, suggesting increased accountability for VIs (external: $B = 0.71$, $p = .017$; internal: $B = 0.55$, $p = .067$). External attribution mediated the effect of influencer type on authenticity more strongly in the no-transgression condition (effect = -1.05 , 95% CI $[-1.46, -.065]$) than under transgression (effect = -0.40 , 95% CI $[-0.75, -.04]$), reinforcing Study 1’s findings.

Together, these findings demonstrate that attribution processes depend on context and timing, offering a more dynamic view of how consumers evaluate human and VIs. While VIs are generally seen as less responsible and less authentic, a transgression prompts consumers to assign them more internal attribution, which paradoxically boosts perceived authenticity. Study 1 shows that transgression moderates attribution’s effect on authenticity, while Study 2 confirms that attribution shifts when transgression is introduced after initial judgments, reflecting the fluid nature of consumer moral reasoning. Across both studies, humans consistently receive more attribution overall, but VIs experience a relative increase in internal attribution and decrease in external attribution following a transgression. These attribution shifts matter: greater internal attribution predicts higher perceived authenticity—especially in the presence of a transgression—while external attribution consistently lowers it. Thus, under certain conditions, transgressing may humanize VIs and enhance their persuasive effectiveness.

Selected References

Heider, F. (1958). *The psychology of interpersonal relations*. Wiley.

Metts, S. (1994). Relational transgressions. In W. R. Cupach & B. H. Spitzberg (Eds.). *The dark side of interpersonal communication* (pp.217–239). Hillsdale, NJ: Erlbaum.

SESSION 24.7: WHO GETS IN, WHO GETS HEARD, WHO GETS JUSTICE

Moderators:

Can Trinh

Summary Brief

The Price of Access: Identity Tensions and Brand Dilution in the Eyes of Brand Owners

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Access-based consumption has transformed how consumers engage with aspirational brands, enabling temporary use without ownership. Prior research has focused on accessors and platform strategies. Yet, the perspective of brand owners, the core consumers whose identity is often tied to ownership, remains underexplored. This netnographic study analyzes 141 posts from online communities of high-end handbag and luxury watch owners to understand their perceptions of aspirational access. Four themes emerged: devaluation and distaste for access, inauthenticity and outgroup status, access as a temporary state, and access economy opportunities for owners. Findings suggest owners often view accessors as inauthentic and potentially harmful to brand meaning, though some recognize the utility of access for trial or resale. A future research agenda is offered to explore how aspirational access reshapes brand equity, community boundaries, and stakeholder perceptions.

Introduction

Aspirational brands have historically relied on exclusivity, high price points, and scarcity to maintain their symbolic value (Han, Nunes, & Drèze 2010; Vigneron & Johnson 2004). The rise of access-based consumption (Bardhi & Eckhardt 2012) challenges these boundaries, allowing consumers to gain the symbolic benefits of luxury without purchase. While access can broaden reach, it introduces a class of users whose participation may disrupt brand meaning. This is especially relevant in categories where ownership is central to identity.

This research addresses a gap in marketing literature: how brand owners perceive access-based consumption and the consumers who use these services. Owners' perspectives matter because their loyalty and advocacy are foundational to aspirational brand equity.

Method and Key Findings

A netnographic approach (Kozinets 2002) was used to analyze discussions among owners in two online communities: *purseforum.com* (high-end handbags) and *watchuseek.com* (luxury watches). An indirect, projective prompt elicited recommendations for access-based services, and archived threads were also analyzed. A total of 141 posts were coded using grounded theory methods. Two additional trained judges coded the data, achieving 94.7% inter-rater agreement (Neuendorf 2017).

Theme 1: Devaluation and Distaste for Access (53.6%)

Owners compared access-based consumption to rentals, associating it with poor product care, reduced authenticity, and financial irresponsibility.

Theme 2: Inauthenticity and Outgroup Status (20.9%)

Accessors were often labeled as “poseurs,” using brands for image without the legitimacy of ownership. Owners positioned themselves as the authentic in-group, viewing access as a threat to brand meaning (Bellezza & Keinan 2014).

Theme 3: Access as a Temporary State (18%)

Some owners valued access as a “test drive” before purchase, framing it as part of the ownership journey rather than a replacement.

Theme 4: Access Economy Opportunities for Owners (7.5%)

Certain owners were open to monetizing unused items through access-based platforms, particularly with older or less relevant styles, allowing them to retain symbolic control.

Table 1: Future Research Agenda Based on Owner Perceptions

Theme	Potential Research Question(s)
1. Devaluation and Distaste for Access	• How do negative owner perceptions of access-based consumption affect brand evaluations? • Does the platform type influence owner responses? For instance, brand-owned (e.g., Nuuly) vs. third-party (e.g., Rent the Runway). • What signals or cues can brands use to maintain a sense of premium value within access models?
2. Inauthenticity and Outgroup Status:	• How can brands reframe access to avoid associations with inauthenticity or mimicry? • Do owners perceive greater brand threat when accessors attempt to signal in-group membership? • What messaging strategies can preserve perceived brand integrity across user groups?
3. Access as a Temporary State:	• When is access viewed as a legitimate path to ownership versus a threat to brand identity? • Are some product categories more likely to be viewed as acceptable for trial through access? • How do access experiences influence future loyalty and purchase intent among owners?
4. Access Economy Opportunities for Owners:	• What roles are brand owners willing to play in access-based ecosystems (e.g., resale, lending, referrals)? • What incentives might motivate owners to participate without feeling brand erosion? • Do brand owners selectively share lower-status or out-of-style products to preserve their symbolic control over the brand?

Discussion and Implications

Overall, the findings reveal deep identity tensions between brand owners and access-based consumers. While some owners acknowledge practical benefits of access, many view it as a platform for brand dilution. Access has the potential to threaten their exclusivity, authenticity, and symbolic value. These perceptions raise important questions about how aspirational brands can navigate the challenges of maintaining brand equity in emerging access-driven markets. To guide future inquiry, a research agenda is proposed that explores how access influences brand meaning and consumer identity across stakeholder groups.

References

Bardhi, F., & Eckhardt, G. M. (2012). Access-based consumption: The case of car sharing. *Journal of Consumer Research*, 39(4), 881-898.

Berger, J., & Heath, C. (2008). Who drives divergence? Identity signaling, outgroup dissimilarity, and the abandonment of cultural tastes. *Journal of Personality and Social Psychology*, 95(3), 593-607.

Escalas, J. E., & Bettman, J. R. (2005). Self-construal, reference groups, and brand meaning. *Journal of Consumer Research*, 32(3), 378-389.

Gleim, M. R., Stevens, J. L., & Johnson, C. M. (2023). Platform marketplaces: unifying our understanding of lateral exchange markets. *European Journal of Marketing*, 57(1), 1-28.

Han, Y. J., Nunes, J. C., & Drèze, X. (2010). Signaling status with luxury goods: The role of brand prominence. *Journal of Marketing*, 74(4), 15-30.

Summary Brief

What Drives Book Sales in a Developing Market? Insights from an Online Platform in Vietnam

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Applying signaling theory to an online book marketplace in Vietnam, the current research identifies controllable and non-controllable signals influencing book sales. A real data set provides timely information on book purchases, revealing novel theoretical and managerial implications.

Introduction

Little is known about how to market books effectively in emerging or developing markets. The present research aims to close this knowledge gap by analyzing real-world book sales data in Vietnam. Extant research on book sales drivers has focused on well-developed markets such as Germany (Caliendo et al., 2015; Shehu et al., 2014), the United Kingdom (Phillips, 2017), and the United States (Yucesoy et al., 2018), leaving a significant knowledge gap about marketing physical books in developing markets. Despite the book category's meaningful contribution to the economy, scant research exists about how consumers choose books in the marketplace (Leitão et al., 2018). We examine a multitude of variables across genres to isolate controllable and non-controllable factors, providing new insight into the consumer decision-making process in an understudied context.

Background

Books are experiential products with many factors contributing to perceived quality. Extensive research has demonstrated the strong relationship between favorable customer ratings and online sales. The number of reviews signals popularity, and many consumers do not want to miss out on a trending cultural product. Furthermore, higher ratings signal quality (Kaur & Singh, 2021). Both signals reduce the information asymmetry and perceived purchasing risk. In addition to the textual commentary, some reviewers post product pictures. Photos evoke more intense emotions and provide insights into some difficult-to-articulate phenomena, generating emotional reactions that increase the perceived helpfulness of a review (Ceylan et al., 2024). We group our variables into two categories: controllable and noncontrollable factors. We predict that there are relationships between these factors.

Key Findings

We found a relationship between book prices and book sales. Similarly, there is a relationship between book sales and discounts offered. Furthermore, we found a relationship between book sales and the number of pictures that reviewers posted.

References available upon request.

SESSION 24.8: FROM MOCK TRIALS TO MICROVIDEOS: BUILDING AI-READY MARKETERS

Moderators:

Joie Hain

Full Paper

TikTok or Not TikTok: Students' TikTok Utilization and Academic Engagement

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Background: As of 2024, TikTok is being investigated in the United States for societal harm apart from other possible harms. This research thoroughly examines the students' TikTok utilization, their academic involvement and relationship between those two. The complex aspects driving TikTok engagement and its impact on academic performance have been analyzed through correlation analysis by the data collected from university students in the United States.

Findings: Our research highlights that the student population is aware of the potential harm of social media, TikTok in this case. Besides, the results reveal a negative association between students' self-reported TikTok utilization and their academic success. While students are aware of the potential harms of social media, factors like frequent checking behaviors and prioritization of academic goals subtly influence their TikTok engagement. This highlights the complex interplay between personal choices and academic obligations.

Implications: Our findings underscore the critical need for early interventions to promote responsible TikTok usage and support academic achievement in the digital age. This information will assist educators in developing more proactive action plans and creating awareness for TikTok usage harms that will improve the well-being of students at the early stages of education.

Limitations: Although our study offers new insights, it still needs more investigation due to its limitations, which include its reliance on self-reported surveys.

Keywords: TikTok, social media, social media engagement, university students, academic performance, correlation

Introduction

The rise of social media has fundamentally altered communication, information sharing, and community building, making it an essential component of the daily lives of students in grades K through 12 and college. Its pervasive effect impacts many parts of their lives, including how they interact with peers, obtain information, and allocate their time. This study, motivated by growing concerns about the potential distractions posed by social media during academic pursuits, aims to investigate social media consumption—such as time spent and multitasking—and its correlation with students' academic success. In terms of social media platforms, this study focuses on TikTok, which has recently become a hot topic in the United States due to its vast and widespread usage. Recent data indicates that over 150 million Americans use TikTok, with a significant portion of users being young people who engage with the platform extensively throughout their daily lives.

The foundation of TikTok is all about short videos. It is the creation of short-length videos that range in length from fifteen seconds to one minute (Yélamos-Guerra et al., 2022). The augmentation of social media platforms such as TikTok has diversified the landscape of digital proximity, influencing many aspects of life, including edification, the process of instruction or improvement, particularly in moral and intellectual domains. (Şot, 2022). This analysis aspires to investigate the influence that TikTok usage has on student academic engagement, with the hypothesis that higher TikTok engagement correlates with academic disengagement.

As of 2024, there is still discussion in the United States regarding the TikTok prohibition dispute. Following President Trump's initial executive orders in 2020 and the resulting legal challenges, the Biden administration made an effort to reassess the app's security issues. When the Committee on Foreign Investment in the United States (CFIUS) started looking into ByteDance, the parent company of TikTok, and held discussions about national security, it was a big step towards the future of TikTok. Meanwhile, despite these efforts, tensions between the United States and China have persisted, complicating resolution attempts. The situation has become even more complicated due to domestic rivalry. Users are anxiously predicting more developments as TikTok's future in the United States remains uncertain due to current legal procedures ("Hear Chinese Official," 2024; "How," 2024; "TikTok Creators," 2024). The US government is looking to reshape social media platforms like TikTok due

to various harms, one of which may be its impact on students' academic habits. This makes it a crucial time to investigate TikTok usage and engagement and analyze its effects on academic success.

This current situation with TikTok in the United States, including the ongoing discussions and the legislative moves towards potentially banning its usage due to concerns over data privacy and national security, adds a layer of complexity to this research topic (Doe, 2024). The core investigation into the correlation between social media use and academic engagement remains highly relevant. Even if TikTok were to be banned, the dynamics of social media influence on students' academic behaviors and outcomes would persist, simply shifting to other platforms that rise in popularity. This adaptability underscores the broader implications of the research, which can extend to Instagram, Snapchat, or other emerging platforms that might captivate the student demographic in TikTok's absence. Thus, understanding these interactions is crucial, as the fundamental patterns of social media engagement and their effects on academic performance are likely to remain consistent across different platforms (Smith & Jones, 2023).

Statement of the problem

Today, many students spend their time on social media while doing their homework like background music, or even while attending classes with their earbuds reducing their attention to the main purpose of the moment. Over the last few decades, social media has been increasingly popular among college students, but there are concerns with using TikTok responsibly (Ngilangil, 2022). This study aims to analyze the impact of TikTok use on students' academic engagement by investigating how various aspects of their TikTok interaction influence both their social media habits and collegiate achievements.

The primary research question investigates the relationship between several facets of TikTok usage—including the duration of engagement with the platform, its perception as a study distraction, the frequency with which it is utilized during other tasks, and the prioritization of intellectual endeavors over TikTok activity—and their effects on students' academic engagement.

Objective of the study

The ultimate objective of this study is to determine the correlation between TikTok utilization and social media (specifically TikTok) impact on the students' education. In addition to that, we aim to analyze if there is a gender impact for both of the variables.

We are looking for answers to the proposed questions below based on the research design:

Question 1: How can we evaluate the utilization of TikTok social media platform and its impact on students?

Question 2: How can we define the students' academic engagement?

Question 3: What is the correlation between gender and TikTok utilization?

Question 4: What is the correlation between gender and students' academic engagement? Question 5: What is the correlation between the TikTok utilization and students' academic engagement?

Based on these questions the null hypotheses that are defined for this research are as below.

Hypothesis 1: There is no correlation between students' TikTok utilization and gender.

Hypothesis 2: There is no correlation between students' academic engagement and gender.

Hypothesis 3: There is no correlation between students' TikTok utilization and their academic engagement.

Significance of the study

As of 2024, TikTok is being investigated in the United States for its potential societal harms. Social media, as one of the most pervasive modern technologies, is used globally for various purposes, including personal

interaction and professional networking. While social media facilitates social interaction and access to information, it has also been linked to negative outcomes such as increased laziness, anxiety, and loneliness. This research study aims to understand the broad and significant impact of social media platforms, specifically TikTok, on students' academic success. Given the extensive use of TikTok and its potential implications for future generations, this investigation is crucial for shaping educational strategies and policies and for understanding student motivation and engagement. The following section will be going through the literature review in depth for this study.

Literature Review

The literature was examined thoroughly to gain insight into studies regarding the impact of TikTok on students' learning, TikTok usage, and students' academic success, which broadly provide evidence of positive uses of the social media for educational purposes as well as potential negative impacts. Millennials are using social media networks and short video platforms to distribute and consume entertainment content (Zhai & Razali, 2021) and TikTok is one of the trendiest platforms. TikTok distinguishes itself from the competitors by enabling anyone to create content thanks to its user-friendly interface and straightforwardness (Clarissa & Lobo, 2022). Despite its predominantly young user base, the challenge posed byClarissa & Lobo aimed to assess TikTok's potential for e-learning, emphasizing motivation and collaborative learning, showing promise for educational content creation and future development to enhance student participation.

The literature review highlights that some studies provide evidence that the usage of TikTok in education can be beneficial. The short videos or clips allow students to fill in the understanding gaps by watching them again until they fully understand them (Sari et al., 2022). TikTok has the potential to be a potent tool for promoting amusing content that encourages people to embrace specific innovative technologies (Wang, 2020). Not long ago, during the pandemic, TikTok became a popular tool for educators to use to reshape their lessons with the help of bite-sized videos. The study suggests that TikTok significantly influences students' learning motivation and achievement, supported by data from interviews and a Google Form questionnaire (Putri et al., 2023). The integration of Instagram and TikTok with Problem-Based Learning improves student outcomes, fostering active participation and leveraging social media for enriched learning (Widarti et al., 2022). This work shows Instagram and TikTok's positive impact on student vocabulary, highlighting social media's educational potential (Rahman, 2021). Highlighting TikTok's role in university sports science, leveraging social media can enhance student motivation and skills, and bridge daily social media use with academic learning (Escamilla-Fajardo et al., 2021). Short instructional videos outperformed traditional virtual lectures in teaching business statistics to Dutch university students, offering insights for higher education hybrid learning (Ding et al., 2022). TikTok physics videos improved Grade 10 students' performance, meeting education standards, and prompting recommendations for continued use, support, teacher training, and research (Flores et al., 2024). TikTok holds great potential for digital pedagogy in elementary education, providing interactive features and a user-friendly interface that engages students and fosters interactive learning.

The underlying mechanisms and external sources of social influence that may affect people's intention to use TikTok in the future remain unknown (Jia et al., 2023). TikTok use increases distraction in class and schoolwork for college students, warranting further research on its effects in diverse learning environments (Mekler, 2021). Depending on how students use it, TikTok has negative and positive impacts (Silalahi et al., 2024). A careful analysis of several research indicates that there is a complex and multidimensional relationship between social media use and academic performance.

Scholarly discussions on this subject have historically been contradictory, vacillating between highlighting the negative effects of excessive social media use on academic performance and acknowledging the possible advantages in terms of cooperative learning and information sharing. It is clear that uncontrolled use can have an impact on an individual's education (Azman et al., 2021). This study is focusing on the aspect of social media TikTok being a distraction tool

TikTok use among Bachelor of Performing Arts students correlates positively with engagement, suggesting its potential as an educational tool (Palli, 2022). TikTok positively impacts learning motivation among Ainul Yaqin Islamic Boarding School students, with a modest correlation coefficient of 0.308 (Syaifuddin & Sari, 2024). An alternative framework for the application of digital media in learning environments is being proposed, which takes into consideration the attention arbitrage factor, which has been overlooked until now. This offers new perspectives for reevaluating the current state of digital media application in learning environments (Rach & Lounis, 2020). One

benefit of using the Tik Tok app in the teaching and learning process is that, when combined with appropriate usage, it can be an engaging, interactive, and creative learning tool (Pramerta, 2019). According to another study, with TikTok materials used in classes, positive body language, elevated levels of focus, participation, and confidence were observed in the student (Robert & Roslan, 2022).

In terms of theoretical framework and methodology, there have been many research methodologies reviewed in the literature that we have cited that used the same/similar theoretical frameworks and methodologies with our proposed model. The correlation between social media use and participation has been examined using regression modeling (Boulianne, 2015). Guesalaga (2016) conducted a study to target the use of social media in sales, and performed a multiple regression analysis of data gathered from a survey of 220 sales executives in the United States. A multiple linear regression model of Petko's (2012) study secondary school teacher survey finds significant positive correlations between the will, skill, and tool variables and the total frequency and variety of technology use in the classroom.

The literature review provides a thorough examination of the impact of TikTok on student learning. It highlights TikTok's potential as an educational tool, emphasizing its ability to enhance motivation and collaborative learning. While studies showcase its benefits in addressing learning gaps and engaging students, concerns about potential distractions and the need for further research are also acknowledged. Overall, the literature underscores the importance of ongoing exploration to fully understand TikTok's role in education and its implications for academic performance.

The order of the next sections will be starting with methodology, going through the analytical results, and conclusion with in depth discussion for the future studies.

Methodology

Research Design and Sample

In the current research, we gathered statistics on TikTok usage among students by employing a quantitative method approach that integrated self-reported questionnaires with digital tracking via Google Forms software application. An online survey was constructed and sent to the general population of various universities in Hudson County and Essex County New Jersey to gather primary data for the study. The poll was sent via social media sites (Facebook, and LinkedIn), as well as email to individuals on a regular basis. The survey was available on all platforms from December 1, 2023, until August 31, 2024. The survey was created using Google Forms and consists of fifty questions sorted by themes for easy understanding and participation. The surveyors have been informed that IRB approval has been done for this survey and their identities would remain anonymous. The completion of the survey indicates their consent to participate in this research study which will take 5 to 7 minutes of their time. They were also informed that they will be asked about their demographics, academic engagement, as well as their social media (TikTok specifically) utilization. The aim of the survey also highlighted that the survey should contribute to the literature about students' TikTok utilization and engagement trends. It was also clearly mentioned at the beginning of the survey that the decision whether or not to participate will not affect their future relationships with the related university or with the investigators. Besides that, the surveyors were allowed to opt-out during any moment of the survey or may also skip the questions if they do not want to answer them.

No assurances can be given by the writers of this research regarding the interception of data transmitted by third parties because data collection was done electronically over the internet. As far as technology allows, the anonymity of the survey responses will be preserved by the writers as well. Yet, after using the data collected for research, the Microsoft Office Excel file was locked with a strong password to which researchers have only personal access. Overall, this extensive dataset contains demographics, quantitative data of students' TikTok usage trends, and their academic success highlights.

The judgmental sampling method was used for this research methodology. It can be challenging to decide which sample is representative of the total population (Tyrer & Heyman, 2016). This means selecting a sample within the represented population randomly.

Measures

Participants answered the survey, which included multiple-item measurement scales adapted from previous literature conducted by Salasac and Lobo (2022) to ensure the measures' content validity. The online survey contained four sections: (1) Permission for survey participation, (2) Demographic variables (age, gender, race/ethnicity, and location), (3) Level of TikTok utilization, and (4) Level of students' engagement. Question formats include multiple-choice and Likert scale. The scales used four-point Likert-type response formats in which respondents rated the content posted by influencers and brands from 1 ("Strongly disagree") to 4 ("Strongly agree") for Section 2 "Level of Students Academic Engagement". Section 3 "Level of TikTok Utilization" Likert-type response format was from 1 ("Not at all characteristics of me") to 4 ("Very well characteristic of me").

The survey responses collected were analyzed using the Microsoft Office Excel data analysis tool to understand the data statistics better and highlight significant insights about the chosen parameters. Analysis methodology was designed by two different approaches: a descriptive method with parameters of Mean (m) and Standard Deviation (SD) that analyzes students' TikTok utilization and their academic engagement. In terms of correlations for gender, independent T-test analysis method used. Besides, as for the statistical approach, Pearson correlation was applied to understand the relationship between two main variables. The Pearson correlation is a population measure of correlation that is frequently used when assumptions regarding the distribution of two continuous variables are normally distributed (Mukaka, 2012).

In the field of academic prioritizing, a positive association has been proposed with the rejection of TikTok; nevertheless, this is also mired in uncertainty, as indicated by confidence intervals that are inconclusive (Duffy & Meisner, 2023). The results of the survey data were analyzed by using Microsoft Office Excel. 242 students answered the survey questionnaire.

Demographic questions in these surveys provide essential insights into participants' backgrounds, allowing researchers to contextualize the collected data. This demographic data serves two purposes. They provide a picture of the survey cohort and allow for a more detailed examination of the findings of gender assessment for our main two variables. This survey included basic demographic questions such as age, gender, race, and location, which allowed for a more complete assessment of the participant poll.

As shown in Table 1, an in-depth review of our participant pool's gender composition of 52.1% male calls for caution when extrapolating our findings while female ratio is 46.3%. The gender skew raises the question of whether these tendencies remain true in a more equal demographic context. As a result, there is a strong urge for more subgroup analysis, dissecting the data along gender lines to uncover possibly varied behavioral interactions with TikTok and their academic implications.

The responses during the survey which targeted adults aged 18 and above years revealed a stark gender disparity (Thomas & Akram, 2021). A majority of this cohort (84.3%) was classified as being between the ages of 18 and 24. This was followed by the 25-30 age bracket, which accounted for 8.3% of all respondents.

A closer look at the racial breakdown indicated that 28.1% of poll respondents were Hispanic or Latino (Froggatt, 2022). Individuals identifying as White accounted for 25.2% of the respondents weight while Asian/Pacific Islander ethnicity back-grounded individuals are 16.5%.

These findings highlight the importance of delving deeper into social media engagement patterns and the influence platforms such as TikTok exert over various demographic strata, particularly in self-image and life view (Harris and Jones, 2022). The survey's demographic composition provides a contextual backdrop against which the nuances of TikTok's influence on adult users can be further explored and understood.

Table 1. Sociodemographic Characteristics of Participants

Demographic category	Count (N)	Percentage
Gender		
Male	128	52.9%
Female	112	46.3%
Prefer not to say	2	0.8%

Age		
18-24	204	84.3%
25-30	20	8.3%
31-35	4	1.7%
36-40	3	1.2%
41 and above	11	4.5%
Race/ethnicity		
White/Caucasian	61	25.2%
Asian/Pacific Islander	40	16.5%
Hispanic	68	28.1%
Black/African American	31	12.8%
Multiple Ethnicity/Other	23	9.5%
American Indian/Alaskan Native	4	1.7%
Prefer not to say	15	6.2%
Location		
USA	233	96.3%
Other	9	3.7%

Findings and Results

The results were conducted towards interpreting four perspectives: Students' TikTok utilization evaluation, academic success evaluation, gender effect for both variables and correlation between those two variables.

In terms of evaluation of weighted mean ranges for two variables, descriptive definitions have been used for the ease in reading of the results. Point-scale descriptions of the weighted means were adapted from the research of Lobo et al. (2022) and are presented in Table 2. The scale has been categorized into four levels, starting from "Very Low" to "Very High".

Table 2. Categories for the weighted mean of TikTok utilization and academic engagement

Descriptive category	Range of weighted mean
Very Low	1.00-2.00
Low	2.01-2.49
Moderately High	2.50-2.99
Very High	3.00-4.00

One of the research aspects that was examined was the impact of numerous parameters on TikTok usage time among students under the main umbrella of "TikTok utilization". The analysis was processed with 242 observations. An overview of the findings is provided below in Table 3. Overall results showed that students' TikTok utilization is in the "Low" range with a mean of 2.21 and SD of 0.21. The highest mean score 3.49 with 0.70 SD was for "My academics are my main focus." and reflecting that respondents' focus on their academics. The lowest mean 1.10 with SD of 0.49 was rated for "I use my TikTok to communicate for group projects," which showed the ineffectiveness of TikTok for academic team studies.

Table 3. Level of Students' TikTok Utilization

Questionnaire item	m	SD	Descriptive category
1. I use my TikTok account for schoolwork.	1.21	0.61	Very Low
2. I use my TikTok account to communicate with my classmates.	1.18	0.63	Very Low

3. I use my TikTok to communicate for group projects.	1.10	0.49	Very Low
4. I use my TikTok as a break while studying.	2.25	1.26	Low
5. I use my TikTok as a free time activity.	2.44	1.26	Low
6. I use my TikTok to procrastinate when I should be studying.	2.13	1.24	Low
7. I use my TikTok to procrastinate if I am struggling.	2.01	1.21	Low
8. TikTok is time consuming.	3.32	0.87	Very High
9. TikTok is an academic distraction.	2.85	1.04	Moderately High
10. TikTok decreases my academic performance.	1.87	1.18	Very Low
11. TikTok takes time away from studying.	2.47	1.14	Moderately High
12. TikTok distracts me from studying.	2.17	1.18	Low
13. I multitask with my TikTok while studying.	1.65	1.06	Very Low
14. I am a responsible person about schoolwork.	3.27	0.81	Very High
15. I am good at multitasking with TikTok.	1.78	1.07	Very Low
16. No one on my TikTok is worth me getting failing grades.	3.29	0.97	Very High
17. I do not spend an excessive amount of time on my TikTok.	2.72	1.09	Moderately High
18. I do not go on TikTok during class.	2.93	1.10	Moderately High
19. I check my TikTok during class.	1.34	0.91	Very Low
20. I do not have TikTok up while doing homework.	2.52	1.15	Moderately High
21. I don't allow TikTok to impact my academics.	3.12	1.00	Very High
22. My academics are my main focus.	3.49	0.70	Very High
23. When I am doing my work for school, I do not check my TikTok.	2.58	1.11	Moderately High
24. I only use TikTok when I have the time for it.	2.30	1.15	Low
Total	2.21	0.21	Low

The following findings were related to students' academic engagement and are presented in Table 4. Overall mean 3.00 with 0.11 SD falls under the category of "Very High" interpretation category which is higher than TikTok utilization results. "Getting a good grade" points out the highest mean of 3.47 with 0.60 SD. It lends evidence to students' focus on their academic achievement. The lowest mean 2.03 with SD of 1.02 measured with the "Going to the professor's office hours to review assignments or tests, or to ask questions.". This might be an interesting fact for the educators to consider its implications, and how to encourage students for the opposite behavior.

Table 4. Level of Students' Academic Engagement

Questionnaire item	m	SD	Descriptive category

1. Raising my hand in class.	2.68	0.97	Moderately High
2. Participating actively in small group discussions.	3.20	0.71	Very High
3. Asking questions when I don't understand the instructor.	2.68	0.98	Moderately High
4. Doing all the homework problems.	3.39	0.72	Very High
5. Coming to online class every day.	3.26	0.85	Very High
6. Going to the professor's office hours to review assignments or tests, or to ask questions.	2.03	1.02	Low
7. Thinking about the course between class meetings.	2.88	0.85	Moderately High
8. Finding ways to make the course interesting to me.	2.79	0.92	Moderately High
9. Taking good notes in class.	3.11	0.81	Very High
10. Looking over class notes between classes to make sure I understand the material.	2.79	0.96	Moderately High
11. Really desiring to learn the material.	3.13	0.80	Very High
12. Being confident that I can learn and do well in the class.	3.37	0.66	Very High
13. Putting forth effort.	3.41	0.69	Very High
14. Being organized.	3.22	0.79	Very High
15. Getting a good grade.	3.47	0.60	Very High
16. Doing well on the tests.	3.22	0.69	Very High
17. Staying up on the readings.	2.77	0.93	Moderately High
18. Helping fellow students.	3.14	0.81	Very High
19. Making sure to study on a regular basis.	2.78	0.91	Moderately High
20. Finding ways to make the course material relevant to my life.	2.86	0.88	Moderately High
21. Applying course material to my life.	2.88	0.89	Moderately High
22. Listening carefully in class.	3.34	0.71	Very High
Total	3.00	0.11	Very High

When both variables are compared, academic engagement has a higher mean and SD versus TikTok utilization which means that students are generally more invested and involved in academic pursuits than they are in spending time on TikTok.

The statistical correlation between students' TikTok utilization and gender is presented in Table 5. The result of independent T-test analysis indicates that there is no statistically significant difference between gender $t(237) = -0.679$, $p = 0.498$ which is lower than .05 even though female ($M = 2.60$, $SD = 0.13$) has a higher TikTok consumption than male ($M = 2.57$, $SD = 0.15$) and we can accept the hypothesis 1.

Table 5. Correlation analysis between gender and TikTok consumption

	<i>Male</i>	<i>Female</i>
N (Observations)	128	112
Mean	2.57	2.60
SD	0.15	0.13
df	237	
t Stat	-0.679	
P(T<=t) two-tail	0.498	
t Critical two-tail	1.970	

Table 6 illustrates the statistical correlation results between students' academic engagement and gender. The results of independent T-test analysis show that there is statistically significant difference between gender, $t(237) = -3.243$, $p = 0.001$ which is lower than .05. That means there is a meaningful relationship between TikTok utilization and students' gender, and female has a higher level of academic engagement ($M = 3.28$, $SD = 0.21$) than male ($M = 3.08$, $SD = 0.25$) and we can reject the hypothesis 2.

Table 6. Correlation analysis between gender and academic engagement

	<i>Male</i>	<i>Female</i>
N (Observations)	128	112
Mean	3.08	3.28
SD	0.25	0.21
df	237	
t Stat	-3.243	
P(T<=t) two-tail	0.001	
t Critical two-tail	1.970	

Lastly, the statistical correlation between students' TikTok utilization and academic engagement is presented in Table 7. The result of Pearson correlation is showing the range ($r = 0.351$, $p < .001$) and the correlation is significant at the 0.01 level (2-tailed). That means there is meaningful and positive correlation between TikTok utilization and students' engagement. So, we can reject hypothesis 3 and conclude that students' TikTok utilization is statistically correlated with their academic engagement.

Table 7. Relationship between TikTok engagement and academic engagement

Correlations		
Engagement		
	<i>r</i>	<i>p</i>
TikTok Consumption	0.351	<.001

**Correlation is significant at the 0.01 level (2-tailed).*

Apart from statistical correlation analysis, this research can also suggest some highlights based on the survey outcomes. “TikTok takes time away from studying” the survey item has mean of 2.47 with 1.14 SD and interpreted as “Moderately High” which shows awareness of students. Furthermore; “TikTok is an academic distraction.” with a mean of 2.85 and SD of 1.04 interpreted as ‘Moderately High’ is another supporting key point to address that students are strongly aware of TikTok impacts. Students are able to assess TikTok’s harm to themselves, and their academic studies. The research results will be summarized in the conclusion section next as well as highlighting the areas of improvements and suggestions for the future continuity of the study.

Conclusion and Discussion

The aim of this study is to investigate the characteristics of university students’ TikTok usage, their academic engagement, and the correlation between these variables in the United States. Our findings reveal that while TikTok usage appears to have a certain level of impact on students’ academic engagement, the overall importance of academic priorities among respondents is evident. The “moderately high” level of academic engagement observed indicates the seriousness of the student body regarding their studies. Conversely, TikTok utilization was found to be “low,” suggesting that students are aware of its potential as a time-consuming social media channel. Besides, our statistical analysis revealed that female has higher academic engagement versus male and it confirms the gender component in the study.

This outcome may alleviate some concerns about TikTok’s negative impact on students’ academic success, as it does not seem to affect their performance negatively. These insights can inform educators and policymakers in developing strategies that balance the use of social media platforms like TikTok with the promotion of academic excellence and engagement. According to Smith and Jones (2023), students’ prioritization of academic responsibilities remains robust despite their engagement with social media platforms, a finding that this research supports. By understanding these dynamics, stakeholders can better navigate the integration of social media in educational contexts, ensuring that academic success remains paramount.

Our correlation model provides substantive insights into academic success behaviors that are not associated with TikTok use, but it is also crucial to consider the study’s limitations. Data gathered from surveys or self-reported assessments may contain biases such as response bias or social desirability bias, which may lead students to inaccurately report their TikTok usage or academic engagement due to perceived societal expectations or personal biases. Additionally, the timing of data collection during the academic year may affect the outcomes, as different periods (e.g., semester breaks) might yield different results. Trends in TikTok usage or academic engagement may fluctuate over time, so the results may not reflect long-term patterns or changes. Additionally, the exclusive focus on TikTok limits the scope of our research, excluding other social media platforms that might also impact academic engagement. A broader analysis could provide a more comprehensive understanding of social media’s overall influence on student behavior. As highlighted by Brown et al. (2020), acknowledging methodological limitations is essential to enhance the reliability and validity of research findings.

Despite these constraints, our study underscores the overarching importance of academic priorities among students, suggesting that TikTok usage has a certain impact on academic engagement. This finding aligns with Smith and Jones (2023), who observed that students’ prioritization of academic responsibilities remains robust despite social media engagement. These insights can inform educators and policymakers in developing strategies that balance the use of social media platforms with the promotion of academic excellence and engagement, ensuring that students’ academic success remains a priority.

Academic institutions should continue to explore ways to integrate technology effectively in the classroom to enhance student learning (Rahimullah et al., 2022). Due to the short, engaging, often humorous, and potentially educational nature of TikTok videos, they could serve as valuable teaching resources to reinforce concepts, provide illustrative examples, and trigger memorable associations for students (Bernard, 2021). Future research should expand its focus to include a variety of social media platforms to understand their individual and collective impacts

on student life. Longitudinal studies are needed to examine the long-term effects of social media on educational success and psychological well-being.

Recent findings by Garcia and Smith (2023) suggest that incorporating TikTok content into educational practices can enhance student engagement and learning outcomes. Although our study indicates that TikTok may not significantly affect academic engagement, understanding its dynamics can inform the development of strategies that balance social media use with academic excellence. Effectively incorporating TikTok or other platforms into teaching takes planning and discussion and potential risks or reactions should be assessed prior to implementation. By leveraging the educational potential of TikTok and similar platforms, educators and policymakers can foster environments that support both learning and the overall development of students while enhancing fun and creativity in the classroom.

Statements and Declarations

Ethical considerations

This study received ethical approval from the Saint Peter's University IRB (approval # 011722202) on October 11, 2023.

Consent to participate

This study received informed consent by the Saint Peter's University IRB (approval # 011722202) on October 11, 2023, and by the survey guidelines.

Consent for publication

This study received informed consent by the Saint Peter's University IRB (approval # 011722202) on October 11, 2023, and by the survey guidelines.

Declaration of conflicting interest

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References

Azman, A. N., Rezal, N. S. A., Zulkeifli, N. Y., Mat, N. A. S., Saari, I. S., & Hamid, A. S. A. (2021). Acceptance of TikTok on the youth towards education development. *Borneo International Journal*, 4(3), 19-25. <http://majmuah.com/journal/index.php/bij/article/view/98>

Bernard, A. V. (2021). Expanding ESL students' vocabulary through TikTok videos. *Lensa*, 11(2), 171-184. <https://doi.org/10.26714/lensa.11.2.2021>

Boulianne, S. (2015). Social media use and participation: a meta-analysis of current research. *Information, Communication & Society*, 18(5), 524-538. <https://doi.org/10.1080/1369118x.2015.1008542>

Brown, C. D., White, E. F., & Johnson, G. H. (2020). Methodological considerations in studying social media effects on academic engagement: A review of current research. *Journal of Applied Social Science Research*, 12(2), 145-158.

- Clarissa, S., & Lobo, J. (2022). The rising popularity of TikTok during the pandemic: Utilization of the application Vis-À-Vis students' engagement. *American Journal of Interdisciplinary Research and Innovation*, 1(2), 43-48. <https://doi.org/10.54536/ajiri.v1i2.699>
- Duffy, B. E., & Meisner, C. (2023). Platform governance at the margins: Social media creators' experiences with algorithmic (in)visibility. *Media, Culture & Society*, 45(2), 285-304.
- Ding, N., Xu, X., & Lewis, E. (2022). Short instructional videos for the TikTok generation. *Journal of Education for Business*, 98(4), 175-185. <https://doi.org/10.1080/08832323.2022.2103489>
- Escamilla-Fajardo, P., Alguacil, M., & López-Carril, S. (2021). Incorporating TikTok in higher education: Pedagogical perspectives from a corporal expression sport sciences course. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 28. <https://doi.org/10.1016/j.jhlste.2021.100302>
- Froggatt, W. (2022). The influence of TikTok on consumer behavior and brand engagement. *Journal of Digital & Social Media Marketing*, 9(2), 200-210.
- Flores, F. A., Maguate, G., Moises, R., Ohoylan, J. G., & Alegre, A. (2024, February 8). TikTok application to the student's performance in science, *International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence*, 1(2), 97-106. <https://risejournals.org/index.php/imjrise/article/view/49>
- Garcia, R. S., & Smith, T. L. (2023). Leveraging TikTok content for educational purposes: A pilot study on student engagement and learning outcomes. *Journal of Educational Technology*, 18(4), 567-582.
- Guesalaga, R. (2016). The use of social media in sales: Individual and organizational antecedents, and the role of customer engagement in social media. *Industrial Marketing Management*, 54, 71-79. <https://doi.org/10.1016/j.indmarman.2015.12.002>
- Harris, A., & Jones, M. (2022). TikTok as a pedagogical tool for developing digital literacies and STEM engagement. *TechTrends*, 66(2), 158-167. <https://doi.org/10.1007/s11528-021-00650-2>
- Hear Chinese officials react to potential TikTok ban. (2028, April). Cnn. Retrieved May 25, 2024, from <https://www.cnn.com/videos/business/2024/03/13/tiktok-ban-vote-bytedance-china-marc-stewart-vpx.cnn>

How TikTok Lost the War in Washington. (2024, April 28). The Wall Street Journal. Retrieved May 25, 2024, from <https://www.wsj.com/tech/how-tiktok-lost-the-war-in-washington-bbc419cc>

Jia, Q., Xu, X., Zhou, M., Liu, H., & Chang, F. (2023). Exploring the determinants of continuous intention in TikTok from the perspective of social influence: a mixed approach of SEM and fsQCA. *Journal of Electronic Business & Digital Economics*, 2(1), 45-68. <https://doi.org/10.1108/jebde-07-2022-0016>

Lobo, J., Dimalanta, G., Bautista, C., Buan, E., & De Dios, D. A. (2022). TikTok Consumption and level of class engagement of performing arts students in the new normal: destructive or beneficial? *American Journal of Education and Technology*, 1(1), 1-9. <https://doi.org/10.54536/ajet.v1i1.305>

Mekler, Audrey (2021). The Effects of TikTok Use on College Student Learning. *Undergraduate Review*, 16, 145-153. https://vc.bridgew.edu/undergrad_rev/vol16/iss1/19

Mukaka, M. (2012). Statistics corner: A guide to appropriate use of correlation coefficient in medical research. *PubMed*. <https://pubmed.ncbi.nlm.nih.gov/23638278>

Ngilangil, K. M. (2022). TikTok on SNSU students: Engagement and influence. *International Journal of English, Literature and Social Science*, 7(4), 150–155. <https://doi.org/10.22161/ijels.74.22>

Palli, E. (2022). View of the rising popularity of TikTok during the pandemic: Utilization of the application vis-à-vis students' engagement. *American Journey of Interdisciplinary Research and Innovation*, 1(2), 43-48. <https://journals.e-palli.com/home/index.php/ajiri/article/view/699/342>

Petko, D. (2012). Teachers' pedagogical beliefs and their use of digital media in classrooms: Sharpening the focus of the 'will, skill, tool' model and integrating teachers' constructivist orientations. *Computers and Education/Computers & Education*, 58(4), 1351–1359. <https://doi.org/10.1016/j.compedu.2011.12.013>

Pramerta, I. G. P. A. (2019). Interactive video as English teaching materials for speaking. *Yavana Bhasha: Journal of English Language Education*, 1(1). <https://doi.org/10.25078/yb.v1i1.712>

- Putri, N. a. D., Kamaluddin, K., & Amrina, A. (2023). TikTok application on achievement and learning motivation at influence colleges. *Journal of Science and Technology*, 2(1), 80-96.
<https://doi.org/10.55849/scientechno.v2i1.62>
- Rach, M., & Lounis, M. (2020). The focus on students' attention! Does TikTok's EduTok initiative propose an alternative perspective to the design of institutional learning environments? In *Lecture notes in networks and systems* (pp. 241–251). https://doi.org/10.1007/978-3-030-49264-9_22
- Rahimullah, N. A., Damayanti, S. B., Izra, A. A., & Handayani, P. W. (2022). Assessing the factors influencing users accessing higher education content on TikTok. *Cogent Education*, 9(1).
<https://doi.org/10.1080/2331186x.2022.2148498>
- Rahman, M. S. (2021, December 26). Analysis Regression and Path Model: The Influence of Both Instagram and TikTok in Improving Students' Vocabulary. *Sketch Journal: Journal of English Teaching, Literature and Linguistics*, 17(1). <https://jurnal.stairakha-amuntai.ac.id/index.php/SKETCH/article/view/152>
- Roberd, A., & Roslan, R. (2022). Social media and primary school science: Examining the impact of TikTok on year 5 students' performance in light energy. *International Journal of Social Learning*, 2(3), 366-378.
<https://doi.org/10.47134/ijsl.v2i3.173>
- Salasac, C., & Lobo, J. (2022). The rise of TikTok during the pandemic: Association between TikTok consumption and students' engagement. *International Journal of Education, Science, Technology, and Engineering*, 5(2), 34-40. <https://doi.org/10.36079/lamintang.ijeste-0502.422>
- Sari, E. F. N., Siregar, N. M., Sukiri, S., Julianti, R. R., & Resza, A. M. (2022). How physical education through TikTok makes a difference: The use of TikTok to promote learning activities. *International Journal of Human Movement and Sports Sciences*, 10(2), 187-192. <https://doi.org/10.13189/saj.2022.100208>
- Silalahi, M., Marbun, T., & Purba, N. R. (2024). The influence of social media (TikTok) in the environment of PPKN semester 3 majors in the application of social justice values: Case study at Sisingamangaraja University XII North Tapanuli. *Education Achievement*, 5(1), 104-111.
<https://doi.org/10.51178/jsr.v5i1.1770>
- Smith, A., & Jones, B. (2023). The impact of social media on academic priorities among students: A quantitative analysis. *Journal of Educational Psychology*, 45(3), 321-335.

- Syaifuddin, S., & Sari, D. C. (2024). The influence of the intensity of using TikTok social media on student learning motivation. *International Journal of Innovative Research in Multidisciplinary Education*, 3(2), 179-183. <https://doi.org/10.58806/ijirme.2024.v3i2n07>
- Şot, İ. (2022). Fostering intimacy on TikTok: A platform that ‘listens’ and ‘creates a safe space’. *Media, Culture & Society*, 44(8), 1490–1507.
- TikTok creators file suit to block US divestment or ban law. (2024, May 14). Reuters. Retrieved May 27, 2024, from <https://www.reuters.com/legal/tiktok-creators-file-suit-block-us-divestment-or-ban-law-2024-05-14/>
- Tyrer, S., & Heyman, B. (2016). Sampling in epidemiological research: issues, hazards and pitfalls. *BJPsych Bulletin*, 40(2), 57–60. <https://doi.org/10.1192/pb.bp.114.050203>
- Thomas, K., & Akram, S. (2021). TikTok and youth privacy: Understanding and mitigating risks. *Journal of Information Privacy and Security*, 17(1), 5–18.
- Wang, Y. (2020). Humor and camera view on mobile short-form video apps influence user experience and technology-adoption intent, an example of TikTok (DouYin). *Computers in Human Behavior*, 110. <https://doi.org/10.1016/j.chb.2020.106373>
- Widarti, H. R., Rokhim, D. A., Munzil, M., & Zakia, N. (2022). The effect of integrated Instagram and TikTok learning media with PBL learning model on increasing student learning outcomes on the topic of qualitative analysis of cation. *JKPK (Jurnal Kimia Dan Pendidikan Kimia)*, 7(3), 394-402. <https://jurnal.uns.ac.id/jkpk/article/view/67032/38768>
- Yélamos-Guerra, M. S., García-Gámez, M., & Ortiz, A. M. (2022). The use of TikTok in higher education as a motivating source for students. *Porta Linguarum*, 38, 83-98. <https://doi.org/10.30827/portalin.vi38.21684>
- Zhai, X., & Razali, A. B. (2021). An overview of the utilization of TikTok to improve oral English communication competence among EFL undergraduate students. *Universal Journal of Educational Research*, 9(7), 1439-1451. <https://doi.org/10.13189/ujer.2021.090710>

Summary Brief

AI and The Future of Higher Education: A Study on Student's Perception of AI-Designed Education

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This research aims to explore students' perceptions of online courses that are designed and managed by AI. It seeks to understand their acceptance, trust, and perceived effectiveness of courses entirely designed by AI. It aims to investigate whether students view a fully AI-designed course as beneficial or problematic. This study analyses students' perceptions of AI-designed courses toward Overall Quality, Grading & Student Evaluation, and their usefulness for Future Job Preparation. It aims to offer important insights into the future applications of AI in higher education, which will help foster more innovative and effective learning experiences.

Introduction

Artificial Intelligence (AI) is rapidly reshaping higher education through personalized learning tools and automated administrative systems. AI tools contribute to various aspects of course development and delivery, however, the concept of university courses fully designed and delivered by AI remains unexplored. This study addresses this gap by investigating student perceptions of hypothetical online courses fully designed by AI, focusing on three main aspects: perceived quality, grading and assessment, and job preparedness. By investigating students' perception of the quality of such courses, this research offers critical insights that can shape the development of new educational approaches. It will enable educators and AI developers to design courses that align more closely with learners' needs and expectations. By exploring how students feel about the usefulness of AI-designed courses in preparing them for future job markets, this research provides crucial insight for shaping curriculum design to meet industry demands, ensuring that graduates have the skills and knowledge they need to succeed in their careers. This study also investigates students' perception of AI-managed assessment processes. This can offer insights into the perceived effectiveness, fairness, and efficiency of AI in assessments. Understanding students' concerns and satisfaction levels can guide improvements in AI assessment methods, making them more reliable and acceptable to the student body. Moreover, the study's results provide essential data for policymakers and educational leaders. By understanding the advantages and challenges of AI-designed courses, stakeholders can make decisions about integrating AI technologies in higher education, ensuring these innovations enhance the learning environment. Additionally, the study underscores the importance of incorporating student feedback in developing AI-designed courses. Educators can create more engaging, personalized, and effective learning experiences by prioritizing students' needs and preferences, leading to better educational outcomes. Finally, the insights from this research will help educators and institutions innovate their teaching practices by integrating AI with traditional methods, resulting in a more enriched learning environment where AI and human instructors collaborate to enhance student learning.

Background

Artificial Intelligence (AI) has increasingly transformed education by enabling personalized learning, intelligent tutoring, and automated assessment (Coppin, 2004; Chen et al., 2020). Adaptive platforms and intelligent tutoring systems improve educational quality by tailoring content to individual learning needs, although issues like scalability, ethics, and privacy remain challenges (Kabudi, Pappas, & Olsen, 2021). AI is also reshaping industries by driving innovation and efficiency across sectors such as manufacturing, finance, and healthcare (Daugherty & Wilson, 2018; Lee et al., 2020), making AI literacy crucial for future job preparedness. Integrating AI into education can better equip students with critical thinking, problem-solving, and adaptability skills needed in the workforce (Holmes, Bialik, & Fadel, 2019). In assessment, AI offers immediate, personalized feedback but also raises concerns about emotional impacts and fairness (Swiecki et al., 2022; Saplacan et al., 2021). Studies on student perceptions reveal overall positive attitudes toward AI's role in education for its efficiency and personalization benefits, though students emphasize the continued importance of human interaction and oversight (Pratma, Sampelolo, & Lura, 2023; Kumar & Raman, 2022).

Key findings

Students reported significantly positive perceptions of personalized learning in AI-designed courses ($t = 6.46, p < .001$), with high agreement that AI can offer tailored learning experiences ($M = 3.77$). AI's ability to adapt course content to students' needs was also viewed positively ($t = 3.51, p = .001$). Students trusted AI grading as fair and unbiased ($t = 4.31, p < .001; M = 3.66$), and found the evaluation criteria clear and transparent. Participants expressed strong confidence in AI recommending relevant courses and keeping content aligned with industry standards (both $t = 6.21, p < .001; M = 3.83$). They also believed AI could effectively integrate practical skills ($t = 3.81, p < .001$). However, engagement received mixed reviews ($t = 1.66, p = .103$), and students were slightly sceptical about AI managing a full course independently ($t = -1.91, p = .062$). These results suggest strong support for AI-enhanced education, especially in personalization and content alignment, but with a continued preference for human oversight.

Key References

Coppin, B. (2004) *Artificial Intelligence Illuminated*. Boston, MA, USA: Jones and Bartlett.

Chen, L., Chen, P. and Lin, Z. (2020). Artificial Intelligence in Education: a Review. *IEEE Access*, [online] 8, pp.75264–75278.

Kabudi, T., Pappas, I. and Olsen, D.H. (2021). AI-enabled Adaptive Learning Systems: A Systematic Mapping of the Literature. *Computers and Education: Artificial Intelligence*, [online] 2, p.100017. doi:<https://doi.org/10.1016/j.caeai.2021.100017>.

Daugherty, P.R. and Wilson, H.J. (2018). *Human + Machine: Reimagining Work in the Age of AI*. [online] Google Books. Harvard Business Press.

Lee, J., Davari, H., Singh, J., & Pandhare, V. (2020). *Industrial AI: Applications with sustainable performance*. Springer.

Holmes, W., Bialik, M. and Fadel, C. (2019) *Artificial Intelligence in Education: Promises and Implications for Teaching and Learning*. Boston: Center for Curriculum Redesign.

Swiecki, Z., Khosravi, H., Chen, G., Martinez-Maldonado, R., Lodge, J.M., Milligan, S., Selwyn, N. and Gašević, D. (2022). Assessment in the age of artificial intelligence. *Computers and Education: Artificial Intelligence*, [online] 3(3), p.100075. doi:<https://doi.org/10.1016/j.caeai.2022.100075>.

Saplacan, D., Herstad, J. and Pajalic, Z. (2018). Feedback from Digital Systems Used in Higher Education: An Inquiry into Triggered Emotions - Two Universal Design Oriented Solutions for a Better User Experience. *Studies in Health Technology and Informatics*, [online] 256, pp.421–430. Available at: <https://pubmed.ncbi.nlm.nih.gov/30371503/>.

Pratama, M.P., Sampelolo, R. and Lura, H., (2023). Revolutionizing education: Harnessing the power of artificial intelligence for personalized learning. *Klasikal: Journal of Education, Language Teaching and Science*, [online] 5(2), pp.350–357. doi:<https://doi.org/10.52208/klasikal.v5i2.877>.

Ravi Kumar, V.V. and Raman, R. (2022). Student Perceptions on Artificial Intelligence (AI) in higher education. 2022 IEEE Integrated STEM Education Conference (ISEC). doi:<https://doi.org/10.1109/isec54952.2022.10025165>.

Summary Brief

An Exploratory Study on College Students' Acceptance and Usage of Artificial Intelligence: Results from Two Universities

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This exploratory study investigates the acceptance and usage of artificial intelligence (AI) among college students using the Technology Acceptance Model (TAM) as a theoretical framework. Data were collected from business students at two southeastern U.S. universities. Although, the results of the study found that most college students use AI, the frequency of usage in their academic and daily lives remain moderate. While students had favorable attitudes toward AI, and they reported that AI was easy to use and useful, they were neutral about AI helping them perform better and learning better in their classes. Notably, students were unconcerned about trust or reliability in AI responses, and most did not feel that using AI was unethical. Overall, this study found favorable attitudes and acceptance of AI but also reveals a gap between positive perceptions and the meaningful integration of AI education into academic settings.

Introduction

In May 2025, Forbes published an article sharing that 250 CEOs from Fortune 500 companies called for the USA to mandate K-12 education in Artificial Intelligence. Multiple countries including China and the UAE, have already mandated AI education (Katz, 2025). Moreover, Payne (2024) addressed the future of marketing as a blend of human expertise with the mastering of AI technology. As college educators, we must be prepared to provide this education to our students as they enter the industry workforce by understanding how they currently engage with AI in academic settings.

In 2024, Schei, Møgelvang, and Ludvigsen conducted a global empirical article review of the perceptions and use of AI Chatbots among higher education students. The authors analyzed 47 articles published between November 2022 and September 2023, finding that more than 50% of the research comes from Asia, with STEM being the largest discipline represented, followed by Interdisciplinary Studies. This study highlights a notable gap in the literature, especially with research focused on business students in the United States as they prepare to enter a technologically driven workforce. Thus, the current study addresses that gap by exploring the acceptance and usage of AI among U.S. business students.

Moreover, because of the rapid evolvement of AI, the related research quickly becomes outdated. The public release of ChatGPT's free version in November 2022 (Scribbr, 2023) was followed by a rapid escalation of new, and often free, Generative AI making it more readily available for student use. However, this widespread move to AI reflects a change in accessibility more than formal educational integration. One recent study by Hazari (2025) evaluated student perceptions toward ChatGPT, including benefits, challenges and applications in the higher education setting. Building on this foundation, this current study furthers the Hazari (2025) study by utilizing the Technology Acceptance Model (TAM) in researching student use, attitudes, and performance along with trust, ethical implications, and institutional policy.

Methodology

Data were collected from 172 business students at a small public and a small private university in the southeastern United States. A mixed-methods survey was used consisting of quantitative 7- point Likert-scale items and open-ended qualitative questions. The quantitative questions measured the constructs of ease of use of AI, perceived usefulness of AI, attitude toward AI, intentions to use AI, attitudes toward new technologies, performance in class with AI, perceived learning with AI, trust in AI, policies about AI usage, and challenges of AI usage. Qualitative questions included how long students have been using AI, why they started using AI, dislikes of AI, and

examples where AI significantly impacted their learning. Demographic questions were also asked on the questionnaire.

Key Findings

Familiarity and Usage

- 53.4% of students had used AI for 1 year or less; 24.4 % for 1-2 years; 8.1% for 2 years or more; 11% did not use AI.
- 48.2% of students felt very familiar or extremely familiar with AI; 49.4% felt little or somewhat familiar.
- Most recognized tools: ChatGPT (87.2%), Grammarly (83.7%), Gemini/Bard (28.5%), and Copilot (26.7%).
- Common academic uses: Study guidance (61%), research (56%), writing assistance (55.3%), and problem solving (39.5%).
- Reported use was moderate: academic (3.37), professional (3.25), and daily life (3.19).

Attitudes and Perceptions

- Students found AI easy to use (5.3) and useful (5.0).
- Students were neutral about AI improving learning (4.64) and classroom performance (4.42). Students were also neutral about concerns that AI would reduce their learning (4.01).
- Students had favorable attitudes toward AI (4.89), slightly higher than toward technology overall (4.78).

Trust and Ethics

- Students disagreed that there is a lack of understanding of how to use AI (2.89).
- Students somewhat disagreed that AI is inaccurate (3.58) and unethical to use (3.28).
- Students reported being neutral about trust in AI responses (3.94).

Institutional Context

- 34% were required to use AI in a class, and 23% were required to use AI in a previous class.
- 59% reported being restricted from using AI in a current class.
- Students somewhat disagree that their universities provide access to AI tools and resources (3.87).
- Students agreed that their university (5.45) and that their instructor (5.50) had policies about AI usage.

Conclusions

By applying the Technology Acceptance Model (TAM), this research contributes to the growing body of AI literature in marketing education by providing insight into student perceptions and the impact of the institutional context. In summary, this exploratory study reveals that while almost ninety percent of students surveyed used AI, their actual frequency of use remains moderate across academic, professional, and personal contexts. Importantly, while students had favorable attitudes toward AI, reporting that it was easy to use and useful, they rated the academic benefits as neutral and suggested that many students were restricted from using AI in their coursework. Also, students were mostly unconcerned about trust or reliability in AI responses, and most did not feel that using AI was unethical.

References

Hazari, S. (2025), Marketing students' perceptions toward ChatGPT: An AI-assisted thematic analysis. *Marketing Education Review*, 1-17. <https://doi.org/10.1080/10528008.2025.2470198>

Katz, L. (2025, May 8). Mandatory AI education for all U.S. students? Top CEOs say yes." *Forbes*.
www.forbes.com/sites/lesliekatz/2025/05/06/mandatory-ai-education-for-all-us-kids-250-plus-ceos-say-yes/

Payne, I., (2024). The future of marketing: A blend of human expertise and AI capabilities. SSRN.
<https://ssrn.com/abstract=4914625>

Schei, O. M., Møgelvang, A., & Ludvigsen, K. (2024). Perceptions and use of AI chatbots among students in higher education: A scoping review of empirical studies. *Education Sciences*, 14(8), 922.
<https://doi.org/10.3390/educsci14080922>.

Scribbr, (2023, June 15). When was ChatGPT released? <https://www.scribbr.com/frequently-asked-questions/when-was-chatgpt-released/#:~:text=ChatGPT%20was%20publicly%20released%20on%20November%2030%2C%202022>

SESSION 24.9: INNOVATION IN TEACHING COMPETITION—SESSION II

Moderators:

Larry Neale

Innovations in Teaching Competition

Beyond the Static Persona: Amplifying Consumer Insights with Business-Facing AI Persona Bots

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Consumer personas have become a common marketing education tool, where students are introduced to the market research practice of bringing customer segments to life. This industry-driven practice may include exposure, but also can emphasize the creation of personas to drive consumer empathy and campaign relevance. However, in practice, these personas frequently remain static, text-heavy slides that are quickly forgotten by clients and students alike. As I observed students struggle to connect their research insights with actionable, real-world marketing strategies, I realized something was missing: interactivity, realism, and relevance. The "a-ha" moment came following discussion of the "Digital Twin of the Customer" to my students—a growing trend in industry (Castro et al., 2024). After a discussion with an e-commerce practitioner and expert in user-experience design, I was inspired to turn this into a novel activation in the classroom. Ultimately, I realized students could build their own simplified version of a digital twin using generative AI (genAI). This insight led to the development of the Consumer Persona Bot innovation that offers three major outcomes: 1) Deepening students' understanding of persona development, 2) Enhancing the value of class-client work, and 3) Filling the gap of genAI marketing education (Narang et al., 2025).

INNOVATION DESCRIPTION

While some creative classroom assignments encourage static profiles, this project required students to bring to life a research-based consumer persona using genAI, ultimately creating a business-facing tool for real-world small business clients. These "Persona Bots" were based entirely on their primary and secondary research and designed to be business-facing tools. Unlike common service bots in the marketplace designed for consumer interaction (Zhang et al., 2024), these Persona Bots were designed as internal insight tools. These are intended to act as quick-reference digital twins of a target customer, based entirely on students' research and persona development. The aim was to enable small business owners to interact with a dynamic, research-grounded persona, helping them better understand their customers' motivations, preferences, and journey pain points.

This assignment directly supported client marketing and customer experience (CX) strategy. CX Design students conducted original research to develop a detailed persona. In collaboration with a local economic development group, each student group was assigned a client, walkable from campus. Charged to identify ways to enhance their client's customer experience, their research was comprehensive and included interviewing the client, market analysis, observing the physical location, auditing their website and associated apps and social media platforms, and scraping Google reviews for additional analysis on consumers' experience with the client. Students conducted research to build detailed personas (incorporating demographics, psychographics, goals, pain points, etc.) and journey maps, leveraging design thinking (Batat & Addis, 2021). The images in Figure 1 highlight the embodied learning process, as students engaged their acquired personal knowledge, and not genAI at this stage.



Figure 1. Students' Persona and Journal Map Development

Following the embodied process, students digitized their Consumer Persona and Journey Map for the first portion of their client deliverable. While genAI was allowed at this stage, if acknowledged appropriately, students heavily relied on the work done in class and leveraged genAI as an extension (not to produce the deliverables).

After I graded with feedback on how to improve their Personas and Maps, I then introduced students to the Digital Twin of the Consumer phenomenon. Following the interactive, discussion-based lecture, I then led a workshop to teach students how to leverage genAI to simulate their persona's communication style and mindset for their next client deliverable. We used the free tool Easy-Peasy.AI, in which students could load their data. In the workshop, we walked through the tool, where I provided sample prompts and details to remember, such as:

PROMPT: I am creating a bot that represents a Persona that will support a client. The aim is so that the client can leverage the Persona (bot) for ideating ways to improve the persona's journey, identify potential events and marketing they would be interested in, and even help create marketing strategies and copy/creative ideas to support the client's marketing to this persona.

We also reviewed ethical considerations and risks in using this tool, such as not including the client's name or confidential data on the platform. To ensure quality persona bot training, we reviewed common client questions:

- *What kinds of pain points are you encountering online?*
- *What are some events we, as a small retailer, could host to meet your needs?*
- *We are launching a new product in our line. What kinds of marketing communications should we use to reach you?*
- *We need a catchy tagline for our new eco-friendly product. What would appeal to you?*
- *How do you feel about loyalty programs?*
- *Which social media platforms are you likely to engage with?*

We also discussed the necessity to humanize the bot, as the aim is to make this a valuable resource for their clients. This includes not only providing more detail and multiple possible journeys or stories but also prompting for specific interaction style, giving the bot personality, and building in a way to make the bot continue to improve.

Following the final presentations, the Persona Bots were provided to the clients in their final deliverable, and they were invited to ask questions. These Persona Bots made consumer insights far more accessible and actionable than traditional reports. The bots, reflecting true consumer insights, offered dynamic, research-backed responses. Clients were given continued access to the bots after the consultation.

DISCUSSION

Students responded enthusiastically to the opportunity to create something interactive and strategic. Many reported feeling more connected to their research, as they had to "step inside" their persona's mindset and anticipate how that person would speak and respond. This deepened their empathy, improved their messaging instincts, and taught them to be more intentional about voice and tone in their deliverables. This was highly evident in their final deliverables, where they created a short CX Design film to bring recommendations and a touchpoint opportunity to life. I found the films were more centered on the personas than in the prior year without this addition. Additionally, clients expressed strong interest in the persona bots as practical tools.



Figure 2. Sample from Groups' AI Chatbot

Instructors can easily adapt this to a wide range of marketing courses. Courses such as Consumer Behavior, Advertising, Product Development, and Retailing may lend quite well as ways to enhance current customer understanding. Understandably, not all courses may have the time to engage in all elements. As such, this assignment could be used across courses, where one group engages in research (such as in a Marketing Research or Marketing Analytics class) and then is shared with a course that can leverage the tool for more applied assignments. This could allow these student groups to share feedback with the Persona creators to enhance the Bot. This form of peer learning offers ways to enhance students' learning and emulates practitioner work.

If educators decide to adopt the innovative Persona Bot assignment, there are a couple of things to keep in mind. Firstly, it is important to choose the right tools. There are a number of growing free or low-cost AI platforms that are adding this capability. I recommend testing several, as these tools continue to improve. Additionally, it may be more valuable to have students engage first in primary research (qualitative or quantitative) and secondary research to ensure accuracy and not over-reliance on genAI. Furthermore, it will be important to emphasize to both students and clients that bots are not customer-facing chatbots, but internal tools to communicate consumer insights to stakeholders. Lastly, if possible, partner with local businesses or have students act as internal consultants to present the bot and show its potential for CX and marketing insight.

The Persona Bot teaching innovation bridges research, empathy, AI fluency (Richter et al., 2024), and client communication in a way that reflects the rapidly evolving demands of the marketing profession. Furthermore, this assignment also supports active and experiential learning, preparing students for the workforce by blending technical skill-building (e.g., AI prompting, research synthesis) with soft skills (e.g., empathy, communication, storytelling). Ultimately, Persona Bots offer a scalable, high-engagement solution for helping students and clients alike better understand and act on consumer insight.

REFERENCES

Batat, W., & Addis, M. (2021). Designing food experiences for well-being: A framework advancing design thinking research from a customer experience perspective. *European Journal of Marketing*, 55(9), 2392-2413.

- Castro, A., Cruz, G., Bough, V., & Tiwari, S. (2024). Enhancing the customer journey with gen AI-powered digital twins. *McKinsey Digital*, <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/tech-forward/enhancing-the-customer-journey-with-gen-ai-powered-digital-twins>
- Narang, U., Sachdev, V., & Liu, R. EXPRESS: When AI Wears Many Hats: the Role of Generative Artificial Intelligence in Marketing Education. *Journal of Public Policy & Marketing*, 07439156251328237.
- Richter, S., Giroux, M., Piven, I., Sima, H., & Dodd, P. (2024). A Constructivist Approach to Integrating AI in Marketing Education: Bridging Theory and Practice. *Journal of Marketing Education*, 02734753241288876.
- Zhang, W., Slade, E. L., & Pantano, E. (2024). Humanlike service robots: A systematic literature review and research agenda. *Psychology & Marketing*, 41(12), 3157-3181.

Teaching Innovation Competition

Transforming the Marketing Principles Textbook

Experience through a Free Access Handbook

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The Need for Innovation in the Marketing Principles Course

Students taking the “Marketing Principles” course are a mix of Marketing majors, other business majors, and majors outside of business (e.g., Communications, Pre-med, Art) at the current university. This course is open to all students with at least sophomore standing. Historically, the Marketing Principles course services well over 1,000 students, yearly. Marketing Principles is the entry-level marketing course and includes introductory topics of the marketing mix, buyer behavior, marketing research, and segmentation.

Previous to the innovation, students were required to purchase an e-text and online activities companion combination from a well-known, national, higher education publisher. This e-text/companion course requirement cost students a total of \$174,649 each year (1,310 students x \$133.32). Anecdotally, Marketing Principles instructors received concerns from students that the e-text/companion requirement is too expensive and, occasionally, that a student cannot afford to make the purchase for the course. If some students express this concern, others may have had concerns about costs, too.

Some Evidence Supporting the Creation of the Innovation

In the early ideation of the innovation, a survey of upper-level marketing students (n=14) was conducted. Students indicated that they pay an average of \$129 (SD=\$46) per textbook for a course and the top three mentions about experiences with previous textbooks have to do with price, use, and value. Specifically, students think that textbooks are 1) too expensive, 2) not utilized enough, and 3) not worth buying.

Students who participated in the survey gave their feedback about a potential free book. The overwhelming common theme was that the book would help with students’ finances. Students liked the ideas that local businesses could be featured in the book and that multiple department faculty would be authoring the chapters. Students also ranked the importance of characteristics of a free textbook. The results indicated that having a digital option, clear writing, and a glossary of key terms are the most important characteristics.

Purpose of the Innovation

Creating a free, open-source handbook would allow the opportunity to address students’ financial needs and students’ preferences for a book that will be used often and kept for future reference. The objective of this innovation was to create a handbook of marketing content that serves multiple purposes: 1) to substitute for the current course materials (a national publisher’s e-textbook and online activities companion) requirement in the Marketing Principles course, 2) to be a customized collection of marketing content, created with the current university’s student in mind, and which can be further developed over time, 3) to capitalize on the diversity of marketing subject matter faculty experts within the department, 4) to serve as a Marketing program-long handbook that students will refer to before each subsequent Marketing course they take at the university, and 5) to be available as a free access resource to students as they start their careers and beyond.

Description of the Innovation

The innovation created to meet these objectives is a handbook of marketing principles used in all sections of Marketing Principles at the university. The handbook features thirteen introductory marketing content topic areas (chapters), with each chapter written by a subject matter expert (SME) faculty member in the department. The topic areas in the book include marketing defined, consumer behavior, B2B behavior, international marketing, strategic planning, marketing research, segmentation, targeting, positioning, product, distribution, price, promotion, personal selling and sales promotion, and digital marketing.

The content features a slimmed down version of a full textbook, with emphasis on key concepts and definitions. The handbook was written with the current university student in mind and includes local area and business

references and examples. The e-book features interactive sections in each chapter in which students have an active role in reading the book. For example, in the Marketing Research chapter, there is an activity where the reader guesses whether a variable is quantitative or qualitative and reveals the answer by clicking a slider feature. Throughout the book, photos and graphics illustrate concepts and processes. Instead of including the typical headshots of authors, fun and casual images show each chapter's author's personality. The handbook includes a hyperlinked table of contents, hyperlinked definitions within the text, a glossary, and an "About the Authors" section.

The handbook is free with unlimited online access to encourage student use throughout their university Marketing program and beyond. The publishing acronym is CC BY-NC, meaning the handbook has a creative commons license with credit given to the creator, for non-commercial uses designation. The handbook was created to be an online source using Pressbooks, a software platform that supports all student accessibility requirements. The link and citation for the handbook are as follows:

- <https://pressbooks.library.vcu.edu/marketingprinciples/>
- Ferguson, J. L., Gilbert, J. R., Gilstrap, K., Makarem, S. C., Mohan, M., Sarma, B. M., & Zamudio, C. (2025). *Marketing Principles from the River City*. VCU Publishing.

Guidelines to Implement this Innovation

A project of this magnitude and involving so many faculty requires strong leadership and a commitment of resources to support the project. For the *Marketing Principles from the River City* project, two faculty editors oversaw the project: one played a project manager role (e.g., timeline administrator, fiscal manager) and one played a creative visionary role (e.g., feel of the book, artistic director). A handbook project such as this also requires significant department faculty buy-in and commitment to writing chapters. In the chapter objectives and outline development period, once-a-month author workshops were held. The workshops included brainstorming sessions and group decision-making regarding the book. Importantly, the faculty editors and authors were also supported by the department's chair and program coordinator in matters of resources and commitment to the success of the project.

Two graduate assistants were critical in the copyediting, importing of the content into Pressbooks, and the visual elements of the book. The graduate students were tapped from the university's graduate advertising program, one from a copywriting track and the other from an art director track. The graduate assistants worked for one semester and took an active role in bringing the book from a working draft to its finished state, including bringing a contemporary, Generation Z feel to the voice and aesthetics of the book.

Fortunately, financial support for open access projects like this are available through open educational resources (OER) programs, both regional and national, and through universities' library initiatives and grant programming. For the *Marketing from the River City* project, a \$20,000 grant was obtained through the Virginia Commonwealth University Libraries' Affordable Course Content Award (ACCA) program, supported by the Barbara Ford Endowment of the 21st Century Fund and The Friends of VCU Libraries. The funds were dispersed as stipends for the editors to oversee the project, stipends for the seven authors who wrote chapters to the book, and the two graduate student assistantships. The ACCA program involved a point-person in the libraries dedicated to providing guidance and a year-long structure to the project and connected the faculty editors with other ACCA recipients in the university for peer experience sharing and support.

The timeline for a project like this needs to be realistic and provide accountability to the editors, authors, and support personnel involved. The total project took three years from inception to publishing. A detail of the timing per stage is as follows: 1) project vision and grant application – three months, 2) chapters and authorships confirmed – three months, 3) chapter objectives and outlines developed – five months, 4) chapters written – nine months, 5) chapters edited, imported into book platform, and graphic design elements added – five months, 6) book soft-launched for one section for one semester – four months, 7) feedback from authors and students collected – three months, and 8) final edits – four months.

Handbook Use in Marketing Principles

After the soft launch of the handbook in a Marketing Principles section, a survey of students (n=7) was conducted to assess behaviors and opinions about the book. Fifty percent of the students said they read "a lot" of the book while another thirty-three said they read a moderate amount. Eighty-six percent agreed that the handbook was very helpful. One student commented, "It was easy to read and follow along with. If you were looking for a piece of information, everything was so organized that you could locate it very easily. The interactive portions were also a cool

way to learn vocabulary.” *Marketing from the River City* is now used in all sections of Marketing Principles at the current university. The handbook is also free and available for any outside instructor, student, or practitioner to use and reference.

Teaching Innovation Competition

Beyond the Study Guide: Using Student-Created Review Videos to Foster Deep Learning in Marketing

Heejung Park, Northern Michigan University, USA

In undergraduate marketing education, exam review sessions have traditionally been instructor-led, with students passively absorbing condensed content shortly before major assessments (Dietrich & Evans, 2022). While common, this approach often falls short in fostering deep understanding or sustained engagement. I began to question whether this unidirectional model truly met the learning needs of students—especially in a time when collaboration, creativity, and digital communication are core competencies in the marketing field (Bisoux, 2024). The turning point came during an informal conversation with students, who shared that they often learned best when studying in groups or explaining concepts to others. One remarked, “I really get it when I have to teach it.” That moment inspired the innovation presented here: student-generated exam review videos shared with classmates prior to exams.

This structured, student-centered activity transforms the review process into a collaborative and active learning experience (Lastner et al., 2021). Students work in small groups of four to five, selecting or being assigned a core course topic—such as branding, segmentation, or pricing strategies—and are tasked with producing a short video (three to five minutes) that teaches the concept to their peers. These videos may take the form of screen recordings, animated explainers, whiteboard tutorials, or live presentations, using tools like Canva, Loom, or smartphones (Arruabarrena et al., 2021). Once completed, the videos are uploaded to a shared course folder or learning management system. Students are then required to watch and provide feedback on at least two peer videos using guided reflection prompts. This stage ensures that students are not only creating content but also critically engaging with their peers’ explanations. To emphasize the value of this work, I incorporate selected examples or questions from the student videos into the actual exam, reinforcing the idea that peer-produced content is central to the course (Morris & Stommel, 2018).

The model is intentionally designed to be flexible and accessible. Instructors can launch the activity approximately two weeks before an exam, providing a list of key topics or allowing students to choose. A clear rubric outlining expectations—clarity, relevance, and creativity—helps maintain academic quality while encouraging student autonomy (Taylor et al., 2024). No advanced editing skills are required; substance is prioritized over polish. Because the videos are shared asynchronously, the activity works well in in-person, hybrid, or online formats (Noetel et al., 2022). Students frequently exceed expectations, using humor, analogies, and real-world examples to make complex marketing ideas relatable. Many report feeling more confident and better prepared—not simply because they studied more, but because they engaged with the material deeply enough to explain it to others.

This innovation is grounded in the Teaching to Learn framework, also known as Learning by Teaching, which posits that students develop deeper understanding when they prepare to teach content to others. Rather than passively receiving information, students must organize, articulate, and anticipate questions about the material—cognitive activities that promote higher-order thinking (Fiorella & Mayer, 2015). In this process, students take on the role of teacher, which pushes them beyond surface-level comprehension into analysis, synthesis, and application (Michaelsen & Sweet, 2011). Teaching also enhances metacognitive awareness, prompting learners to monitor their own understanding and recognize conceptual gaps that might otherwise go unnoticed.

Supporting this pedagogical foundation, prior research shows that teaching others—whether in person or via recorded explanation—can improve retention, deepen conceptual clarity, and enhance knowledge transfer (Nestojko et al., 2014). Creating videos adds another dimension by requiring students to integrate visual and verbal communication, reinforcing principles from multimedia learning theory and increasing engagement (Mayer, 2024). In marketing education, this task simulates real-world activities such as client communication, content marketing, and digital storytelling. By positioning students as both learners and communicators, the project reinforces dual goals: cultivating personal mastery and contributing to collective classroom knowledge—a hallmark of contemporary, student-centered pedagogy (Johnson & Johnson, 2002).

H1: Students who participate in the creation and sharing of peer-generated exam review videos will demonstrate significantly higher exam performance compared to students who do not participate in the video activity.

H2: Among students who participate in the video review activity, higher video quality—as measured by total video assignment scores—will positively predict overall exam performance.

Across several semesters (from Winter 2023 to Fall 2024), I have gathered both quantitative and qualitative evidence to support the effectiveness of this activity. A one-way between-subjects ANOVA was conducted to examine whether participation in a peer-generated exam review video activity affected students' academic performance. Results showed a statistically significant difference in average exam scores between students who created video reviews ($n = 94$, $M = 122.11$, $SD = 17.75$) and those who did not ($n = 98$, $M = 116.83$, $SD = 16.59$), $F(1, 190) = 4.53$, $p = .035$. These findings support Hypothesis 1 and suggest that the inclusion of a student-led review activity positively influenced exam performance. To assess whether the quality of the video reviews influenced performance, a linear regression was conducted with total video review score as the predictor and average exam score as the outcome variable, limited to students who created videos. The model was statistically significant, $F(1, 92) = 8.25$, $p = .005$, with an R^2 of .031. The total video score significantly predicted average exam score, $\beta = 0.413$, $t = 2.87$, $p = .005$, indicating that students who produced higher-quality videos also tended to achieve higher exam scores. This supports Hypothesis 2 and implies that deeper engagement with the content during video creation may reinforce conceptual mastery. Notably, students who are less vocal in traditional class discussions often shine in this format, delivering thoughtful, high-quality content that reflects deep understanding in their own voice. The process also strengthens peer-to-peer relationships, as students refer to each other's work in future discussions, building a shared vocabulary and academic community.

This study provides empirical support for incorporating peer-generated review videos into undergraduate marketing education. Drawing from the Learning by Teaching framework (Fiorella & Mayer, 2015), the results demonstrate that students who actively participated in the creation and sharing of review videos achieved significantly higher exam scores than their peers. Importantly, not all video contributions had equal impact; students who produced higher-quality content—indicated by their video assignment scores—also tended to perform better on their exams. This finding reinforces the theoretical claim that preparing to teach fosters deeper understanding, stronger metacognition, and more effective knowledge retention. The instructional value of this activity lies not only in its cognitive benefits but also in its alignment with key competencies in marketing education. By synthesizing concepts into video form, students engaged in instructional design, persuasive communication, and digital storytelling—skills increasingly valued in contemporary marketing practice. The asynchronous nature of the videos allowed for flexible participation, and the shared viewing experience promoted a sense of peer learning and academic community. While the variance explained by video quality was modest ($R^2 = .031$), the significance of the effect highlights the pedagogical power of active learning strategies that place students in the role of teacher. These findings suggest that review video projects can serve as a meaningful and scalable alternative to traditional, instructor-led review sessions. Future research might explore how this activity interacts with individual learning styles or its long-term effects on retention and course engagement.

References

- Arruabarrena, R., Sánchez, A., Domínguez, C., & Jaime, A. (2021). A novel taxonomy of student-generated video styles. *International Journal of Educational Technology in Higher Education*, 18, 1-20.
- Bisoux, T. (2024, March 20). What can business schools and industry do together? AACSB Insights. <https://www.aacsb.edu/insights/articles/2024/03/what-can-business-schools-and-industry-do-together>
- Dietrich, H., & Evans, T. (2022). Traditional lectures versus active learning--a false dichotomy?. *arXiv preprint arXiv:2206.12144*.
- Fiorella, L., & Mayer, R. E. (2015). *Learning as a generative activity*. Cambridge university press.
- Johnson, D. W., & Johnson, R. T. (2002). Learning together and alone: Overview and meta-analysis. *Asia Pacific Journal of Education*, 22(1), 95-105.

- Lastner, M. M., Delpechitre, D., Goad, E. A., & Andzulis, J. M. (2021). Thank you for being a friend: A peer-learning approach to marketing education. *Journal of Marketing Education*, 43(2), 216-232.
- Mayer, R. E. (2024). The past, present, and future of the cognitive theory of multimedia learning. *Educational Psychology Review*, 36(1), 8.
- Michaelsen, L. K., & Sweet, M. (2011). Team-based learning. *New directions for teaching and learning*, 128(128), 41-51.
- Morris, S. M., & Stommel, J. (2018). An urgency of teachers: The work of critical digital pedagogy. *Hybrid Pedagogy*.
- Nestojko, J. F., Bui, D. C., Kornell, N., & Bjork, E. L. (2014). Expecting to teach enhances learning and organization of knowledge in free recall of text passages. *Memory & cognition*, 42, 1038-1048.
- Noetel, M., Griffith, S., Delaney, O., Harris, N. R., Sanders, T., Parker, P., ... & Lonsdale, C. (2022). Multimedia design for learning: An overview of reviews with meta-meta-analysis. *Review of Educational Research*, 92(3), 413-454.
- Taylor, B., Kisby, F., & Reedy, A. (2024). Rubrics in higher education: an exploration of undergraduate students' understanding and perspectives. *Assessment & Evaluation in Higher Education*, 49(6), 799-809.

Teaching Innovation Competition

The Pyramid Plan for Realistic Marketing Career Preparation

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The task of securing an entry-level marketing job or internship is increasingly challenging due to a confluence of market forces and industry changes, including, but not limited to economic conditions, skills and experience gaps, and entry-level marketing responsibilities increasingly automated and supplanted by AI. An estimated 60% of marketing degree holders in the US will be underemployed 5 years after graduation (Burning Glass Institute 2024). As director of a specialized undergraduate program in digital marketing, I have a front row seat to the difficulties that students face in securing marketing jobs.

I am particularly motivated by the question, “What can I, an individual professor, do to increase students’ odds of getting into their desired careers, beyond teaching relevant marketing skills in class?” The underemployment statistics for marketing students suggest that (1) students’ current approach isn’t working, (2) a marketing degree and marketing classes are insufficient, and (3) university resources like career services aren’t effectively aiding most marketing students. Through informal conversations, I concluded that many students are woefully unaware of their own career readiness (or lack thereof). They may overvalue their marketing experience and misinterpret experience requirements for marketing jobs. There exists the need for an innovation that helps students better self-assess their own experience and experience needs, make a tangible plan to close the experience gap, and communicate that experience for the purposes of job placement—in a way that can be integrated into a marketing course.

In a capstone digital marketing course, I introduced and engineered assignments around a framework I created and call the Marketing Experience Pyramid—a framework meant to help students understand the relative value of different types of marketing experience (see Figure 1), loosely patterned after the Kirkpatrick Model for training evaluation (Kirkpatrick, 2015).

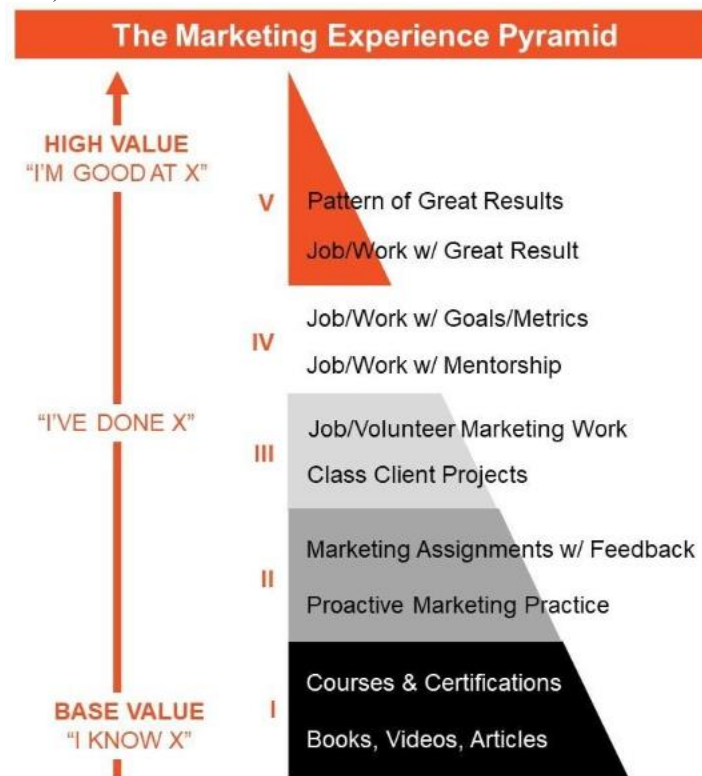


Figure 1. The Marketing Experience Pyramid

Among the many types of marketing experience that students can obtain, these range from very basic demonstrations of what the student knows (marketing books, articles, courses, certifications) to demonstrations of what the student can do (practical class assignments and simulations, client projects, basic marketing jobs or volunteerism, entrepreneurship) to proof of the student's results at marketing (based on measurement and impact). Students who are career-ready are more likely to demonstrate higher-level types of marketing experience before graduation, rather than mistakenly settling for experience only from classes or from more basic types of marketing work. As marketing is a broad field and career preparation is an individual pursuit, I developed a Marketing Pyramid Plan process of assignments to motivate students to take positive, realistic steps toward their career goals.

Pyramid Plan Overview

The Pyramid Plan process for career preparation is a 6-part sequence that can be introduced with corresponding preparation and deadlines in any marketing class, though it is ideal for capstone courses or those that are more career-oriented. In this sequence, students do the following:

1. Update resumes to include all relevant marketing experience.
2. Learn about the Marketing Experience Pyramid and categorize resume experiences into its 5 levels. I also assigned a lengthier reading (scottcowley.com/marketing-experience) to substitute for a more detailed in-person explanation of the Pyramid. This step helps students recalibrate to understand the overall quality and quantity of their marketing experience.
3. Conduct entry-level job research to understand desired skills and experience in the student's target area of marketing. For this step, students have two options. (1) Students can conduct a formal informational interview with a marketing professional who works in their desired role, focused on the marketing experience required for the role. (2) Students can gather and analyze 20 targeted marketing job postings. For each job posting, students must document which marketing experiences or skills are required. Over the course of reviewing all of the job postings, students should have a clear and quantified understanding about which skills and experience are mentioned the most versus the least.
4. Create a Personal Pyramid Plan. Equipped with information about their own level of marketing experience on the Pyramid and corresponding data about the skill and experience demands of entry-level roles, students are asked to summarize their takeaways and propose a workable plan to get experience that is more aligned with their goals and at higher levels on the Pyramid. The instructor provides feedback on the plan's feasibility and may propose improvements before approving the student's plan. The plan should be reasonable and worthwhile within the constraints of the course length and other course commitments. Higher-level marketing experience is challenging to obtain, so the plan may include intermediate stepping stones toward gaining that experience. For example, a student may propose "get an internship" as part of their Personal Pyramid Plan, but this is an outcome rather than a controllable input. The instructor may propose alternative stepping stones like submitting X number of customized internship applications.
5. Execute the plan. Students are encouraged to make progress on their plans and ask for guidance from the instructor as necessary. Instructors may need to require occasional accountability check-ins and should have an ultimate deadline for executing the plan.
6. Report and reflect on progress. Near the end of the course, students should write a summary of the progress they've made relative to their Personal Pyramid Plans and their personal reflections on the effects of their efforts and their next steps. The instructor can add depth to this step by requiring the reflection to be a public LinkedIn post about the student's goals and actions toward those goals. This post should not mention the assignment, but be a chance for students to demonstrate their personal activities and goals in a way that could generate further support from their networks. The instructor may also want to have students solidify their marketing experience through a public online portfolio of work where they can use stronger storytelling and context to showcase higher-level marketing experiences.

Results of Use

The first 4 parts of the Pyramid Plan sequence, as implemented in the capstone digital marketing course, were completed by Week 3 of the course, giving students time to implement their personal plans over the subsequent two months. At the beginning, students were asked a Likert scale question: “How prepared do you feel to find a good career job after graduation?” (1=completely unprepared, 6=completely prepared). Pre-Pyramid responses from 47 students resulted in a mean job preparedness score of 4.19, with 23% of students reporting feeling more unprepared than prepared for a marketing job. A post-Pyramid experience survey reported a mean job preparedness score of 4.80 ($p < 0.001$), with only 1 student still feeling more unprepared than prepared. Qualitatively, students were also asked about the most valuable parts of the experience and their suggestions for improving it. Each of four initial parts of the Pyramid process (resume update, experience categorization with the Pyramid, job skill research, and Personal Pyramid Plan creation) was mentioned at least 10 times by students when asked about the most valuable component. One student commented, “I think the most valuable activity was creating my personal Pyramid Plan. It really helped me step back and think about where I am right now and what I need to do to get closer to my career goals. It made things feel less overwhelming because I could actually see a path forward and what kind of experiences I should focus on outside of class to move up the pyramid.” Another student said, “It really brought me out of a pipe dream, whereas instead it taught me to be more realistic about where I am at.” Many other comments echo these sentiments.

Advice for Educators

Educators concerned with the career preparation of marketing students can use the Marketing Experience Pyramid and Pyramid Plan Process to help students take control of their individualized career preparation. Instructors need to clearly define which experiences fit each Pyramid level. They should also encourage specificity in students’ job posting research because students are prone to research jobs too broadly (ex. “marketing”), leading to an overly broad a set of skills and experiences that make it difficult to create a realistic Pyramid Plan. Educators should also anticipate that some students struggle aligning their Pyramid Plans with their goals, their job research, and the Marketing Experience Pyramid. Individualized feedback on each student’s Pyramid Plan can help maximize the value of this exercise. I also created a custom GPT trained on Pyramid Plan principles to assist students with Pyramid categorization, job experience research, and creating their Personal Pyramid Plans. <https://chatgpt.com/g/g-689ead48d9848191a854e8a690b0afba-marketing-experience-pyramid-ai>

MEET THE EDITORS—SESSION II

Moderators:

Victoria Crittenden

Neel Das

Velitchka Kaltcheva

Sreedhar Madhavaram

Linda Price

Stacey Robinson

Brian Rutherford

David Wooten

SESSION 31.2: DEALER'S CHOICE: HUMAN OR AI AT THE TABLE

Moderators:

Moyosoreoluwa Odugbesan

Full Paper

Blockchain Adoption and Organizational Performance: The Role of Managerial Capabilities and TMT Support

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Sandipan Sen, PhD, Southeast Missouri State University, USA
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The study utilizes the Technology Acceptance Model and Diffusion of Innovation theoretical framework to identify factors that help formulate a positive attitude towards Blockchain technology leading to its eventual adoption. We further examine how top management support and managerial capability moderates the attitude – adoption relationship. Finally, the impact of Blockchain adoption on organizational efficiency is analyzed. Data was gathered from a survey of 195 IT managers across various regions and from a wide array of industries. Using partial least square equation modeling (PLS-SEM) approach, the results show that favorable attitude towards Blockchain facilitates adoption of the technology. Managerial capability positively moderates the relationship between attitude towards Blockchain technology and its adoption while Top Management Support negatively moderates the relationship. Adoption of Blockchain technology was further shown to mediate the relationship between attitude towards Blockchain and organizational efficiency.

Keywords: Blockchain, Technology Acceptance Model (TAM), Diffusion of Innovation, PLS-SEM model.

Introduction

In recent years, the digitization of information has changed the role of IT in the organization in transforming business and marketing infrastructure and in its new role IT has become the core driver of organizations' operations, innovations, and competitiveness (Allam, 2018; Bharadwaj et al., 2013). Businesses have always been fascinated by the emergence of new technologies because they are thought to reduce costs, increase productivity and efficiency and ultimately enhance profits. In less than a couple of decades, Blockchain had emerged as one technology that has advanced business and marketing capabilities. According to the World Economic Forum, by 2025 10% of the world's GDP may be on the blockchain system (Carson et al., 2018; Dhaou et al., 2017).

Blockchain had been in collective consciousness before it seems to have been overshadowed by Artificial Intelligence and Machine Learning. Blockchain technology, initially conceptualized by an anonymous individual or group known as Satoshi Nakamoto in 2008, has evolved into one of the most disruptive innovations of the 21st century. Blockchain applications have attracted the interest of investors across a wide range of industries such as banking, marketing, insurance, communications, entertainment, transportation, healthcare, education, and public services (Friedlmaier et al., 2018).

Researchers and industry professionals have described blockchain in various ways. One called it a “digital, decentralized and distributed ledger in which transactions are logged and added in chronological order with the goal of creating permanent and tamperproof records” (Treiblmaier, 2018). Another describes it as a technology that allows the distribution of auditable ledgers in an immutable (unchangeable), transparent, and secure way (Reyna et al., 2018). Blockchain is the underpinning technology for cryptocurrencies such as Bitcoin (Nakamoto, 2008). Crypto seems to be in the limelight again with the dawn of a new era recently. One of the most well-known applications of blockchain technology is bitcoin. Ethereum, another prominent blockchain platform, introduced the concept of smart contracts—self-executing contracts with the terms of the agreement directly written into code (Feign, 2022). These smart contracts run on the Ethereum Virtual Machine (EVM), enabling decentralized applications (dApps) that operate autonomously and are resistant to censorship or fraud. Blockchain technology also holds significant promise for various industries. In supply chain management, for example, blockchain can provide end-to-end visibility and traceability of products. By recording every transaction and movement of goods on a blockchain, companies can ensure the authenticity and provenance of products, reducing fraud and improving

efficiency. This transparency is particularly valuable in industries like food and pharmaceuticals, where tracking the origin and journey of products is critical for safety and compliance (Church, 2017).

With its numerous advantages, researchers have explored various aspects of its adoption and implementation. Much of this research has focused on identifying factors that directly facilitate blockchain adoption, including: (a) inter and intra-organizational trust; b) technology trust and fit; c) system and information quality; d) top management support; e) competitive pressure; f) relative advantage, complexity and compatibility; g) competence (Alazab et al. 2021; Hashimy, Jain, and Grifell-Tatjé, 2023; Hartley, Sawaya, and Dobrzykowski, 2022; Sciarelli et al. 2022; Prisco et al. 2024).

However, these studies have primarily examined these factors as direct determinants of blockchain adoption. Recent research has expanded this focus by exploring additional contexts and mechanisms. For example, Basdekidou and Papapanagos (2024) investigated how corporate culture mediates the relationship between blockchain adoption and ESG performance in Balkan firms. Dehghani et al. (2022) identified technological factors (e.g., interoperability, technological volatility, data quality), organizational barriers (e.g., lack of technological knowledge), and environmental challenges (e.g., network enhancement, regulatory and standardization uncertainties) that influence blockchain adoption in North America. Similarly, Garg et al. (2021) examined blockchain-enabled banking, concluding that its implementation reduces costs, enhances customer service quality, ensures secure remittance, supports regulatory compliance, and improves both supply chain transparency and performance (Wamba, Queiroz, and Trinchera, 2020).

Despite these advancements, a notable gap persists in the literature regarding the implications of blockchain adoption on critical organizational outcomes, such as organizational efficiency, and the factors influencing the relationship between adoption and efficiency. This study addresses this gap by answering key research questions:

RQ1: How does attitude towards blockchain (i.e., BC attitude) influence blockchain adoption (BC adoption)?

RQ2: Do managerial capability, and TMTs support serve as boundary conditions on the linkages between attitude towards blockchain and blockchain adoption, which ultimately impact on an organizational efficacy.

RQ3: What are the causal relationships between attitude towards blockchain (i.e., BC attitude) and organizational efficacy through blockchain adoption (BC adoption)?

References are available on your request

Summary Brief

The Experience Is the Brand: AI-Powered Chatbot Design as a Strategic Marketing Interface

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Abstract

AI-powered health chatbots are emerging as essential digital healthcare touchpoints, offering personalized user experiences that improve engagement and loyalty. This study examines how the design of chatbots in three popular wellness apps in the United States (Flo, Noom, and Headspace) influences user experience, trust, and brand perception. This research frames chatbot design choices as experiential marketing strategies that shape user engagement and provide insight into user needs. A thematic analysis of direct researcher interactions with each app's AI chatbot identified seven key themes: transparency, privacy, personalization, visual design, brand voice, trust-building features, and ethical disclaimers. Ongoing in-depth interviews will explore user sentiments, offering more profound insight into how experiences with AI conversational agents inform consumer attitudes. The study shows how AI chatbots can build trust, generate valuable consumer insights, and increase engagement, demonstrating the role of conversational agents as strategic tools in experiential marketing.

References available upon request

SESSION 31.3: ANTHROPOMORPHISM, EMPATHY, AND SYNTHETIC CONSUMERS

Moderators:

Linda Ogbonye

Summary Brief

The Role of Anthropomorphism in Shaping Social Categorization of Generative AI Customer Service Agents

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Artificial Intelligence (AI) generative customer service agents are boosting firm revenues by utilizing advanced data analytics and providing real-time insights to clients. In three studies (combined: $N = 1,094$), the authors illustrate that individuals categorize highly anthropomorphized AI financial customer service agents as in-group members, in contrast to less anthropomorphized AI agents, until they experience the uncanny valley effect. When consumers interact with hyper-realistic video representations of AI that seem even more human-like, they label both minimally and highly anthropomorphized AI as out-group members due to the discomfort caused by the uncanny valley effect. Grounded in social identity and uncanny valley theories, these findings open future research avenues. They emphasize how anthropomorphism in AI financial agents impacts perceptions and interactions, balancing human-like traits with the uncanny valley effect. Understanding how consumers classify AI agents based on appearance and behavior can guide the design of the agents.

References available upon request.

Full Paper

Hit or Miss? The Use of AI Tools In Creating Coca-Cola's 2023 “Real Magic” Holiday Ad Campaign

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Artificial intelligence (AI) is reshaping advertising by enabling hyper-personalized, datadriven campaigns; however, its growing use has raised questions about authenticity and emotional resonance. This study examines AI's role in Coca-Cola's 2023 “Real Magic” holiday campaign, The World Needs More Santas, assessing the ad's aesthetic, emotional, and thematic effectiveness. Guided by the Social Construction of Technology (SCOT) framework, we conducted a mixed-methods analysis of audience reactions on YouTube and X (formerly Twitter) to identify dominant perceptions and response patterns. Findings reveal broad user disapproval of the ad's creative direction. Viewers described the visuals as overly synthetic, emotionally flat, and lacking the warmth associated with classic Coca-Cola holiday campaigns. Many regarded the AI-generated aesthetic as inferior to earlier, human-crafted narratives. Overall, the ad failed to connect meaningfully with its audience due to an imbalance between technological efficiency and human storytelling. We recommend a hybrid strategy that integrates AI tools with authentic, human-led creative approaches.

References available upon request.

SESSION 31.4: BELONGING BY DESIGN—CHOOSING HUMANS, ROBOTS, AND JOURNEYS ABROAD

Moderators:

Nusser Raajpoot

Summary Brief

Alumni Values and Study Abroad Experiences

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Lada Kurpis, Gonzaga University, USA

Introduction

Higher education is often characterized as a complex bundle of services (Helgesen, 2008; McCowan, 2017). Like any service, higher education administrators are keenly interested in ensuring that students, and later alumni, are satisfied with their educational experiences (Douglas, Douglas & Barnes, 2006; Douglas, McClelland, & Davies, 2008; Camilleri, 2021; Chauhan, 2023; Sharma & Singh, 2023). The positive experiences of alumni are often shared with their friends and family members, which may lead to new student admissions to that college or university (McClung, & Werner, 2008). Alumni who share their college experiences with the institution may also provide the institution with insights that allow the institution to optimize the bundle of services it offers, and to more effectively market that bundle to prospective students (O'Neill & Palmer, 2004; Pedro & Andraz, 2021).

It is well established within the psychology and marketing literatures that an individual's values shape their attitudes toward a product or service, which in turn affects the individual's intentions to purchase that good or service (Grewal, Mehta, & Kardes, 2004; Paul et al., 2008; Falke, Schröder, & Hofmann, 2022). Values are culturally centered and typically evolve slowly over an individual's lifespan (Watkins & Gnoth, 2005). Thus, values provide a very stable and predictable means to understand the causal factors driving decisions, including consumption-related choices. The decision to attend a specific institution of higher education is fundamentally tied to a prospective student's values. As an obvious example, many higher education institutions are affiliated with a religious or other moral order. Prospective applicants whose values align with an institution's religious or moral orders are more likely to attend that institution. More generally, an individual's values often frame expected outcomes – a desired state of existence – from making a particular decision (Watkins & Gnoth, 2005).

Two of the most common components of the higher education bundle that generate student outcomes are the availability of specific majors and specific study abroad experiences (Cordua & Netz, 2022). The choice of a major creates employment opportunities and career paths after graduation, which underlie the individual's future economic security. Study abroad programs provide an opportunity to experience cultures other than one's own, which expand the student's perspective, allow the student to form new relationships, and possibly acquire new skills (language, etc.) that cannot be effectively learned in a classroom (Iskhakova & Bradley, 2022; Cuong & Tien, 2023).

As noted above, values are stable, and evolve slowly over time. Students enter college with a specific set of values, and as they learn and develop (professionally and personally) during and after a student's college experience, those values evolve accordingly. This leads to an interesting question that has not yet been addressed in the literature. Is there a significant association between a student's decision to study abroad and their values later as an alumnus? Understanding this relationship can be useful not only from a student development perspective, but also from a higher education marketing perspective.

Goals of the Study

This study empirically assessed the relationship between specific values and the decision to study abroad. Because major choice reflects an individual's values, and places constraints (due to credit loads, the sequencing of prerequisite courses, and expected graduation dates) on the opportunity to study abroad, the association between values and study abroad choices is assessed while also accounting for a student's major.

Methodology

The study was operationalized within the context of an effort by Gonzaga University administrators to better understand alumni satisfaction with their degree. A pair of surveys was designed and administered (using stratified sampling and matched control methods) to assess satisfaction. One survey was sent to 800 randomly identified alumni who graduated, but did not study abroad while attending the University. The survey asked respondents to assess their satisfaction with their overall experience at the University. Another survey was sent to

800 randomly identified alumni who graduated, and who studied abroad while attending the University. The survey asked respondents to assess their satisfaction with their study abroad experience. Both surveys asked respondents to complete Kahle (1983; 1984a; 1984b; 1996) and Homer and Kahle's (1988) List of Values (LOV) construct. Thus, the LOV serves as a systematic and consistent means to assess values across both groups of respondents. Differences in LOV items (both overall and for individual items) across the two groups were assessed using Kruskal-Wallis and median sign tests at a five percent significance level.

Key Findings

No significant differences in the overall LOV metric existed based on study abroad participation, or student major, or both. Thus, neither major nor study abroad participation impacted an individual's overall collection of values. However, significant differences did exist when examining individual LOV items, particularly the self-fulfillment item. Alumni who studied abroad exhibited higher self-fulfillment scores.

References

- Camilleri, M. A. (2021). Evaluating service quality and performance of higher education institutions: a systematic review and a post-COVID-19 outlook. *International Journal of Quality and Service Sciences*, 13(2), 268-281.
- Chauhan, J. S. (2023). Brand loyalty and its impact on repeat purchase behaviour of customers: a cross-sectional study in the FMCG context. *Psychology and Education*, 55(1), 684-692.
- Cordua, F., & Netz, N. (2022). Why do women more often intend to study abroad than men?. *Higher Education*, 83(5), 1079-1101.
- Cuong, T. P., & Tien, N. H. (2023). Factors affecting the decision to study abroad to start a business of students at the University of Food Industry in Ho Chi Minh City. *International Journal of Multidisciplinary Research and Growth Evaluation*, 4(3), 563-574.
- Douglas, J., Douglas, A., & Barnes, B. (2006). Measuring student satisfaction at a UK university. *Quality Assurance in Education*, 14(3), 251-267.
- Douglas, J., McClelland, R., & Davies, J. (2008). The development of a conceptual model of student satisfaction with their experience in higher education. *Quality Assurance in Education*, 16(1), 19-35.
- Falke, A., Schröder, N., & Hofmann, C. (2022). The influence of values in sustainable consumption among millennials. *Journal of Business Economics*, 92(6), 899-928.
- Grewal, R., Mehta, R., & Kardes, F. R. (2004). The timing of repeat purchases of consumer durable goods: The role of functional bases of consumer attitudes. *Journal of Marketing Research*, 41(1), 101-115.
- Helgesen, Ø. (2008). Marketing for higher education: A relationship marketing approach. *Journal of Marketing for Higher Education*, 18(1), 50-78.
- Homer, P. M., & Kahle, L. R. (1988). A structural equation test of the value-attitude-behavior hierarchy. *Journal of Personality and Social Psychology*, 54(4), 638-646.
- Iskhakova, M., & Bradly, A. (2022). Short-term study abroad research: A systematic review 2000-2019. *Journal of Management Education*, 46(2), 383-427.
- Kahle, L. R. (1983). *Social Values and Social Change: Adaptation to Life in America*. New York, NY: Praeger.
- Kahle, L. R. (1984). *Attitudes and Social Adaptation: A Person-situation Interaction Approach*. Oxford, UK: Pergamon Press.
- Kahle, L. R. (1984). The values of Americans: Implications for consumer adaptation. *Personal Values and Consumer Psychology*, 77-86.

- Kahle, L. R. (1996). Social values and consumer behavior: Research from the list of values. In *The Psychology of Values* (pp. 135-151). Mahwah, New Jersey: Psychology Press.
- McClung, G. W., & Werner, M. W. (2008). A market/value based approach to satisfy stakeholders of higher education. *Journal of Marketing for Higher Education*, 18(1), 102-123.
- McCowan, T. (2017). Higher education, unbundling, and the end of the university as we know it. *Oxford Review of Education*, 43(6), 733-748.
- O'Neill, M. A., & Palmer, A. (2004). Importance-performance analysis: a useful tool for directing continuous quality improvement in higher education. *Quality Assurance in Education*, 12(1), 39-52.
- Paul, M., Hennig-Thurau, T., Gremler, D. D., Gwinner, K. P., & Wiertz, C. (2009). Toward a theory of repeat purchase drivers for consumer services. *Journal of the Academy of Marketing Science*, 37(2), 215-237.
- Pedro, I. H., & Andraz, J. M. (2021). Alumni commitment in higher education institutions: Determinants and empirical evidence. *Journal of Nonprofit & Public Sector Marketing*, 33(1), 29-64.
- Sharma, D. R., & Singh, B. (2023). Understanding the relationship between customer satisfaction, customer engagement and repeat purchase behaviour. *Vision*, 27(4), 449-457.
- Watkins, L., & Gnoth, J. (2005). Methodological issues in using Kahle's list of values scale for Japanese tourism behaviour. *Journal of Vacation Marketing*, 11(3), 225-233.

Summary Brief

Impact of Financial Burden (deductibles, coinsurance, copayment, and maximums) Imposed by Insurance carriers on Patient Satisfaction and recommendations.

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Introduction

Healthcare spending for most American families is on the rise and health insurance is the route for most families to hedge against unexpected expenses (84% of the U.S. population has some form of health insurance). Typical insurance would pay most expenses while some of the expenses, known as co-payment or coinsurance, are borne by the insured. The co-payment component has increased significantly and rapidly in recent years. This increase has impacted dental treatment much more than medical treatments as most of the dental procedures, except preventative treatments, have high copayment levels. The impact of insurance mandated cost has mainly been researched in terms of access to medical help and on ignoring/delaying treatments that may be deemed critical.

To the best of our knowledge the impact of external financial burden such as copayments on patient satisfaction and recommendations has not been studied in dental settings. The purpose of this paper is to investigate the role of external costs introduced by insurance in ultimate patient satisfaction with the provider. We propose to run experiments using hypothetical scenarios to measure satisfaction with and without copayments.

Patients are upset about high dental copayments for several key reasons. First, high copayments mean that patients have to pay a significant portion of their dental care costs themselves, which can be financially challenging. Dental procedures can be expensive, and high copayments can make it difficult for patients to afford necessary care. Further, patients often compare dental insurance with medical insurance, expecting similar coverage. However, dental insurance typically covers a smaller percentage of costs, leading to frustration and dissatisfaction. Dental Insurance typically has lower annual maximum benefits, often ranging from \$1,000 to \$2,000. These copayments and coinsurance rates can be quite high, especially for major procedures like crowns, root canals, and orthodontics. Most dental insurance plans follow a 100/80/50 payment structure, covering 100% of preventive care, 80% basic procedures, and 50% major procedures. In contrast, medical insurance plans often provide more comprehensive coverage for both preventive and treatment services after the deductible is met. (NerdWallet: Finance smarter) (Capline Dental Services) . (Dental Select) (Insurance Business Magazine) . Patients, therefore, may feel that they are not getting good value for the premiums they pay for dental insurance.

The intent behind co-payment component of insurance was to reduce the unnecessary use of medical systems for treatments which may be of dubious value by forcing them to make a tradeoff between additional costs and expected benefits. This well-intentioned innovation, however, at times, can produce negative outcomes. Its impact on reducing access to necessary treatments, especially among the poor and sick, is well documented (Lazic et al., 2024, Jakobsson & Svensson, 2016, Drummond & Towse, 2012, Gruber, 2006). Very high levels of co-payment can either force one to forgo the necessary treatment or can financially ruin them if they become seriously ill. Additionally, high co-payments place a great financial burden on the poorest and sickest segment of our society.

Role of external cost factors such as deductibles, copayments, and coinsurance on patient satisfaction in dental settings has not been studied. It is quite possible that patients receive excellent dental care, both from dentist and staff, and yet they are upset and dissatisfied because they learned that they have 50% copayments for a filling, root canal therapy or dental implants that can run into thousands of dollars.

Patient satisfaction in dental setting has been measured using a variety of scales. These mostly focus on measuring access or availability of dental care, convenience in terms of location and appointments, cost, quality of treatment, competence of dentists and staff, general attitude of dentist and staff, pain management, and information communication. In previous research cost has been mentioned a possible factor but it was discussed only in terms of

dentist fees. All the above-mentioned factors including cost as dentist fees are considered control factors and dental practices can make improvements and increase customer satisfaction. Co-payments, co-insurance, and plan maximums are introduced by insurance companies and are beyond the control of dental practices, but they impact ultimate patient satisfaction and recommendations. Further complicating factor is that even when dental practices want to waive these external costs, they can't. Not charging copayments is considered billing fraud by insurance companies. A dental practice that routinely waives copayments can run afoul of the federal antikickback statute, 42 U.S.C. § 1320a-7b, or be accused of false billing by private insurance carriers not receiving the discount.

To the best of our knowledge the impact of external financial burden such as copayments on patient satisfaction and recommendations has not been studied in dental settings. The purpose of this paper is to investigate the role of external costs introduced by insurance in ultimate patient satisfaction with the provider. We propose to run experiments using hypothetical scenarios to measure satisfaction with and without copayments.

Theoretical Foundations of Copayments

Several behavioral and economic theories can explain the psychology of the insurance industry's use of co-insurance and co-payments. Remember the main focus of these instruments is to minimize over utilization of resources and bring down the cost of overall healthcare system.

People in general are loss averse. Copayment and coinsurance can be considered as losses i.e., the costs people must pay to receive the necessary services. The idea of loss aversion was derived from the prospect theory (Kahneman, D., & Tversky, A., 1979) that tells us that people are generally more sensitive to losses than to gains i.e., they tend to overweight losses compared to gains of equivalent magnitude. It was hoped that the prospect of losing money as co-payments for force them to carefully consider the trade-off between the benefits expected from the treatment and co-payment.

Humans don't always make purely rational decisions but are influenced by cognitive biases and heuristics. Individuals rely on mental shortcuts (heuristics) to simplify complex decisions and how these shortcuts can lead to deviations from rationality. Ariely, D. (2008) discusses various experiments and findings from behavioral economics research to illustrate how cognitive biases and heuristics influence irrational human behavior. Forcing people to share the cost of health services was expected to encourage them to prioritize more essential or cost-effective care options (Tversky, A., & Kahneman, D., 1974).

Another proposed benefit of co-payments is that when individuals have to contribute financially to their healthcare expenses, they may perceive the services they receive as having greater value. By sharing the cost burden, both parties have a stake in controlling healthcare expenses. This perception of value can influence their satisfaction with their healthcare experiences and may lead to more active engagement in their treatment plans.

Co-pays and co-insurance can encourage behavioral change by motivating individuals to adopt healthier lifestyles or seek preventive care. When individuals bear some financial responsibility for their healthcare, they may be more inclined to take steps to maintain their health and avoid costly medical interventions.

Copay creates a sense of ownership over healthcare decisions and expenses. When individuals contribute financially, they may feel more empowered to make choices about their care and more invested in the outcomes.

Methodology

We will use survey-based methodology. We will use Qualtrics platform to collect data from dental patients. The questionnaire has been developed and we will soon start collecting data.

References

- Ariely, D. (2008). *Predictably Irrational: The Hidden Forces That Shape Our Decisions*. HarperCollins.
- Drummond, M., & Towse, A. (2012). Is it time to reconsider the role of patient co-payments for pharmaceuticals in Europe? *The European Journal of Health Economics*, 13(1), 1-5.
- Grembowski, D., & Conrad, D. A. (1986). Coinsurance effects on dental prices. *Social Science & Medicine*, 23(11), 1131-1138.

- Gruber, J. (2006). The role of consumer copayments for health care: lessons from the RAND health insurance experiment and beyond (Vol. 7566). Menlo Park, CA: Henry J. Kaiser Family Foundation.
- Higuera, L., & Prada, S. I. (2016). Barrier to access or cost share? coinsurance and dental-care utilization in Colombia. *Applied health economics and health policy*, 14, 569-578.
- Jakobsson, N., & Svensson, M. (2016). The effect of copayments on primary care utilization: results from a quasi-experiment. *Applied Economics*, 48(39), 3752-3762.
- Kahneman, D. (2003). A perspective on judgment and choice: Mapping bounded rationality. *American Psychologist*, 58(9), 697–720. DOI: 10.1037/0003-066X.58.9.697
- Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk. *Econometrica*, 47(2), 263–292. DOI: 10.2307/1914185
- Lazic, A., Tilford, J. M., Davis, V. P., & Brown, C. C. (2024). Association of copayments with healthcare utilization and expenditures among Medicaid enrollees with a substance use disorder. *Journal of Substance Use and Addiction Treatment*, 161, 209314.
- Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases. *Science*, 185(4157), 1124–1131. DOI: 10.1126/science.185.4157.1124

SESSION 31.6: MOBILE MARKETS, PERSONAL DECISIONS

Moderators:

Anthony Patino

Full Paper

Marketing Challenges in Surrogacy Tourism

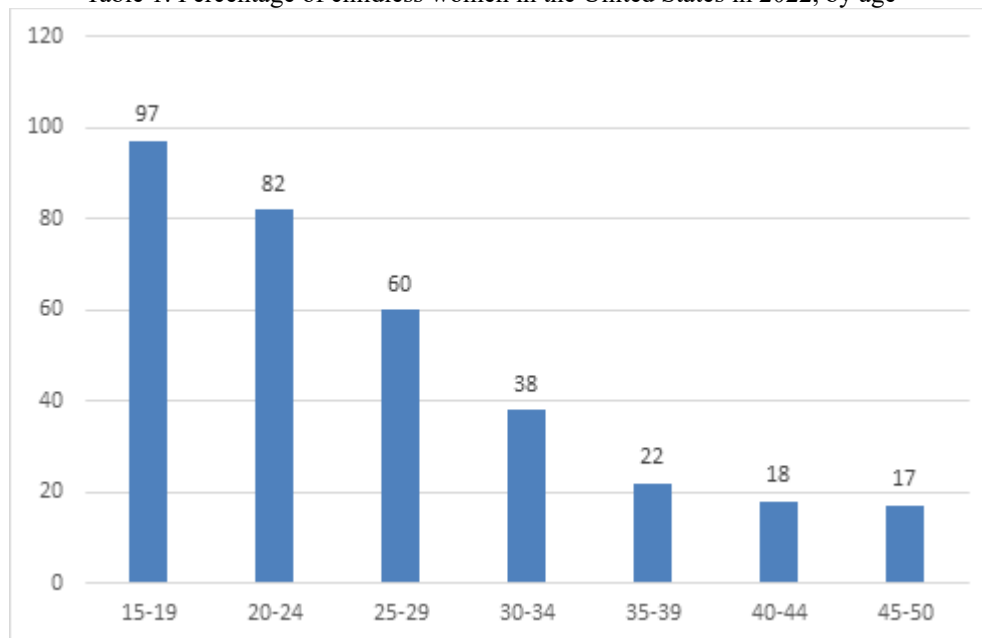
Dr. Somjit Barat, Pennsylvania State University, Mont Alto, PA 17237, USA

For individuals those who are unable or unwilling to conceive or adopt a child, medical and scientific advances have enabled them to become a 'parent' through what is arguably considered the most popular method: surrogacy. For the uninitiated, 'surrogacy tourism' is a practice in which a person travels to a different location, for the baby to be born in the womb of a surrogate mother. While effective information dissemination can make surrogacy accessible to a lot of people for whom surrogacy tourism is the only option to become a parent, lack or misrepresentation of information can pose serious challenges for unsuspecting individuals, which is precisely what this paper focuses on. Given that most research in this field is confined to the medical domain, our focus, in contrast, is on how marketing aspect of surrogacy tourism and as such, addresses an important gap in extant literature.

Introduction

Some individuals (single or couple) either choose not to or are unable to conceive for diverse reasons-- be it social, medical, or otherwise. For example, Table 1 shows the different percentages of US women in the child-bearing age who were childless in 2022. Even though the percentage decreases with increase in age, 60% of US women in 25-29 years age-range were childless in 2022 (Statista, 2024).

Table 1: Percentage of childless women in the United States in 2022, by age



Source: Statista (<https://www.statista.com/statistics/241535/percentage-of-childless-women-in-the-us-by-age/#:~:text=In%202018%2C%2096.9%20percent%20of,44%20years%20old%20were%20childless.&text=As%20of%202018%2C%20a%20little,in%20the%20U.S.%20were%20childless>)

As Camerota (2022) states, one in every 50 children born in the US is through non-natural conception. It is, therefore, obvious that a substantial number of people are childless. Such individuals can choose to avail of ART (assisted reproductive technology) or MAP (medically assisted pregnancy) to become a 'parent', whereby the child, after being 'born' from the womb of a different woman, is 'taken, by the intended parent(s). According to the CDC, the use of ART in the US has doubled in the past decade (CDC report, ND).

Surrogacy birth can happen mainly in one of two ways: in the 'traditional' surrogacy method, the surrogate (i.e., the host) woman uses her own egg, which is artificially inseminated using sperm from the intended father (or a

donor); in the 'gestational' surrogacy method, an embryo is created using IVF (in-vitro fertilization) and it is planted in the surrogate's womb. In either of these methods, the intended parents take 'ownership' of the child after it is born from the surrogate mother's womb.

When such a transaction takes place in exchange for money, it is referred to as 'commercial surrogacy'. If such transaction takes place without any exchange of money (except medical and insurance expenses for the surrogate mother), it is referred to as 'altruistic surrogacy'.

However, often it is either difficult or impossible to avail of surrogacy services in the intended parent's home country due to cost, regulatory or other reasons (detailed later) in which case, travel to a foreign destination is required to accomplish the goal. In such cases, the baby is born in the womb of the foreign woman after which, the baby is 'taken' by the intended parents back to their home country. This practice, popularly referred to as 'surrogacy tourism' and the topic of the current research, raises a host of ethical, legal and regulatory concerns in addition to those that already exist for surrogacy births in general.

In recent years, surrogacy tourism has increased by leaps and bounds. Due to the nature of this practice, accurate data is sometimes difficult to come by—ironically—mainly from countries where it is carried out most extensively, such as Ukraine, Thailand, and India. But even compilation of first-hand accounts, unofficial reports, investigative journalism and imperfect data collection by the respective national governments leave little doubt that surrogacy tourism not only exists but is increasing in demand every day.

It is, therefore, not surprising that considerable research has been conducted in this field. However, most of such research tends to come from the medical or ethical fraternity, with scant attention to the role that advertising, and marketing play in this regard.

On one hand, rigorous promotion of surrogacy tourism has successfully spread the word and has made this convenience available to individuals who would have otherwise been unaware of such opportunity. On the other hand, excessive marketing has resulted in unethical, illegal and in some cases, unhealthy medical practices that service providers, clinics and doctors often participate in, knowingly, or otherwise.

Today, there exists a dark underbelly of the world of surrogacy tourism, whereby unscrupulous organizations either completely evade or twist government regulations to suit their own profit-making motives. In countries where surrogacy regulations are either opaque or non-existent, agencies with dubious credentials exploit loopholes for money-making schemes. Such practices debase human dignity, especially those of the surrogate mothers, put lives at risk, and often fleece money and resources off individuals who had little to start with. A trenchant analysis of such activities and other questionable promotional efforts is the focus of this paper.

The author believes that in addition to filling a void in extant literature, this study will help medical practitioners, regulators, and potential parents to make more informed and better decisions. This will prevent further ethical, legal and medical malpractices at the expense of vulnerable population. Consequently, this study has implications beyond the realm of just marketing and ethics.

It is critical that we have some comprehension and appreciation about the scope and context of the issue at hand. Therefore, we will first discuss the background and motivation for our research, which will be followed by a revisit of the psychology/theoretical underpinnings of parenthood. Then we present data on the extent of surrogacy tourism, while also shedding light on its potential market. The next section discusses the antecedents of surrogacy tourism, followed by a detailed analysis of how promotion and marketing perpetuate this practice to different corners of the world, both from positive and negative perspectives. We conclude with limitations and future directions for our study, providing suggestions as to how we can prevent malpractices even as we offer surrogacy options to those who genuinely need it.

Background and Motivation

Given that a considerable number of people are either unable or unwilling to bear a child the natural way, surrogacy practices have opened up a whole new world of opportunities for them. On the other hand, surrogacy options have given rise to unhealthy medical procedures, unethical marketing practices and other such vices. Given the prevalence of this surrogacy practices (also referred to as ART, assisted reproductive technology or MAP,

medically assisted pregnancy), it is not surprising that there exists considerable research on this topic. However, most research is limited to medical field, which obviously deals with medical and technical complications and risks arising from surrogacy practices. In our research, however, we focus on the marketing, ethical and legal issues that cause as well are caused by the practice of surrogacy. Our analysis raises some deep issues: should marketers be allowed to exploit human emotion and lack of information? Should body parts be made available for sale? Should human emotions and body parts be subject to the same laws of supply and demand as any other commodity? Should the human womb be 'rented out'? Should a person have the right to take 'buy' another person's child? Should individuals be allowed to travel overseas with the sole purpose of surrogacy tourism? Should a child be taken away from his/her birth mother without the child's knowledge?

Perspectives on Parenthood

The reason(s) why we want to procreate are moot. Some academics claim it is the 'maternal instinct' (Reron, 1995), while others propose Darwin's theory of sexual selection as a possible explanation (Paul, 2002). Even though only the female gender is biologically capable of bearing a child, in modern times, however, couples of same sex or even single parents are able to become a non-biological parent through ART. This is possible partly because same-sex marriage or 'single parenthood' have attained popularity in many cultures, and partly because of medical advancements. Consequently, referring to 'parenthood' strictly as 'motherhood' is likely to be derided as male chauvinism. While our attitudes and perspectives towards parenthood have evolved, nobody denies the fact that motherhood is a life-changing experience. As put aptly, 'from onset to its destination, childbearing requires exchange of a known self in a known world for an unknown self in an unknown world' (Rubin 1984 p. 52). Despite motherhood being such a rewarding experience, surveys have shown that many women are either unprepared for it, or simply underestimate its burden and challenges.

Parenthood in general and motherhood in particular, can be reviewed from multiple perspectives, but literature reveals there exist three distinct dimensions: the cognitive perspective, the role-attainment perspective and the parent-infant attachment/bonding perspective.

The cognitive perspective emphasizes the psycho-social acceptance of the woman's superiority in terms of ability to bear a child as opposed to her male-counterpart. Critics, however, argue that this approach breeds female bondage and subjugation, especially in more conservative societies. In other words, the ability of women to exclusively bear children is exploited by men to keep them tethered to the house and family, while the men enjoy complete freedom to move around (Sertz and Wiese, 2020; Veazey, 2018).

The role-attainment perspective emphasizes how the parent's role changes drastically before, during and after the parenthood. This change is more extreme during the first parenthood for obvious reasons. While the proverbial 'joy of parenthood' sounds glorious in theory, the reality, however, is different (Pal, 2019). Research has shown that in the majority of cases, few parents, if any, are prepared to handle the stress, rigor, complexity, challenges and hardships of parenthood (Wilder, J.L. et al., 2021). The challenge arises from multiple fronts such as physical, emotional, financial, social and marital. While a detailed analysis of challenges lies under the purview of nursing and family studies, it suffices to say that surrogacy has opened up such topics to both the sexes alike.

The third perspective i.e. parent-child bonding has taken on a completely new direction with the popularity of surrogate births (Ruhe et al., 2022). While surrogate births have enabled individuals (who otherwise would not have been able) to become a parent, it has given rise to the complex issue of separating a child from its biological mother in exchange for money. In some sense, ubiquitous surrogacy births have snapped the pristine proverbial notion of mother-child attachment, which strikes a deathblow to the very institution of parenthood (Werner-Bierwisch et al., 2018). Critics of surrogacy argue that the cruel and inhuman act of separating the child from its biological mother is good neither for the mother nor for the child but benefits only the intended parents who have the money to pay for it.

A yet fourth perspective on childbirth, as envisioned by the current author, is that of Maslow's hierarchy of needs (Hooper, 2020); once a person has satisfied his/her physiological needs (food, clothes) and safety needs (medical, protection from danger), the individual typically longs for love and belonging (see Figure 1). This triggers a need to become a parent in such individuals. Consequently, individuals who are unable or unwilling to give birth resort to surrogacy to address this need i.e., the need to love and 'be loved' (Bophela, 2022; Barat, 2020; Hale et al., 2019).

Figure 1 Maslow's Hierarchy of Needs



Reproduced from Maslow's Hierarchy of Needs by Saul McLeod, 2007 (available at <https://www.simplypsychology.org/maslow.html>)

Potential Market

Medical tourism in general and surrogacy tourism is particular, have both become widely popular in recent days. The medical tourism market is expected to grow at a compounded annual growth rate (CAGR) of almost 16% during the 2019-2025 period (Bookman and Bookman, 2007; Crooks et al., 2017). Globally, more than 21 million people travelled abroad to seek medical care of which, 1.4million were Americans (Barat, 2021, 2021). Thailand hosted 2.4 million medical tourists in 2016 (Medhekar et al. 2018), and experts predicted that the Indian medical tourism market would be worth US\$ 8 billion by 2020 (Thornton, 2015), and expected to grow by 30 per cent annually (Naik and Lal, 2013).

Although precise estimates of the number of surrogate tourists are difficult to come by for obvious reasons, one estimate suggests that between 500 million and 2 billion surrogate tourists visited India before the practice was banned in December 2018 (Dutta and Sarkar, 2016). According to another estimate, "...100–150 babies are born to surrogate mothers in India each year" (Gupta, 2012). As far as the US is concerned, another estimate pegs the number at 5000 between 2004 and 2008, while it is also approximated that about 9 surrogate births happen in each US state every year (Modern Family Surrogacy Center, 2022). According to Independent Lens of the Public Broadcasting Service (PBS), in 2018, over 100 surrogate children were born just in the state of Idaho, arguably the surrogacy capital of the US (Independent Lens, 2019). Furthermore, as per the Center for Disease Control (CDC) on ART, "there were 330,773 ART cycles performed at 448 reporting clinics in the United States during 2019, resulting in 77,998 live births (deliveries of one or more living infants) and 83,946 live born infants." (ART Success Rates, 2022).

While it may be relatively easier to harness data on country-specific surrogacy births, especially in countries where it is legal, it may be far more difficult to collect data on surrogacy tourism. What we know, however, that certain countries such as India, Thailand and Ukraine are hotbeds for surrogacy births. In India, for example, the surrogacy tourism industry was worth about 450 million USD per year, while the Confederation of the Indian Industry was predicted to generate about 2.3 billion annually by 2012 and to fetch about 6 billion USD per year in the future. To quote an Indian newspaper ad, "No one in the world can match our numbers—55 surrogates successfully pregnant at the same time" (Pande 2009), which gives us an indication of the extent to which surrogacy tourism is rampant in India. It must be noted, however, that commercial surrogacy was officially banned in India in December 2018 and restricted the ability of foreigners to apply for surrogacy tourism in India (Saran and Padubidri, 2020). Another estimate for 'surrogacy business' in India is \$445 million.

No matter which of the above perspectives we look at, there is little doubt that the demand for surrogacy births is substantial. To be more specific, singles, married homosexual or heterosexual couples who are unwilling or unable to give birth, homosexual or heterosexual unmarried partners, divorcees or widowers who are unable to but still want to become a 'parent', constitute the largest market for surrogacy. One estimate suggests that one-in-ten couples in the West have problems bearing a child the natural way, while another research suggests that one out of every six couples are victims of infertility (Binoy, 2018). One source suggests that as high as ten to fifteen percent of married couples are unable to bear child after twelve months of trying (Storey, 2000). While exact numbers are

difficult to ascertain, there seems to be a preference for surrogacy birth over adoption, because it is possible to have the 'biological connection' between the surrogate child and the intended parent, which is absent for adopted children. Consequently, the market for surrogate births is expanding (Panitch, 2013).

Antecedents

Surrogacy tourism, like many other practices, has been fueled by several factors: a) transportation, (specifically, aviation) that allows movement of both human beings and their body parts (gametes, eggs, oocytes) at unprecedented speeds over unforeseen distances, thereby enabling surrogacy births to take place in the womb of the surrogate mother; such seamless and speedy transportation facilities not only enable individuals to transport body parts but also store excess embryos or eggs in case of failed surrogacy pregnancy or for future surrogate births; b) information technology and scientific advancements (especially the Internet) that allow individuals and organizations in the remotest parts of the world to get in touch with those of the industrialized world to facilitate surrogacy and c) globalization, a concept that started with the movement of goods across national boundaries that eventually percolated to human body parts moving thousands of miles for the exclusive purpose of giving birth to a new life (Gupta et al., 2008; Donchin, 2011). Such a marketplace of human body parts and its fast movement across national boundaries in a free-market model have enabled couples to become 'parents' on one hand, but also made it difficult for governments to restrict such unwanted practices even if they wanted to.

Antecedents of surrogacy tourism can be categorized as 'push' and 'pull' factors: Push factors are basically those that provide an incentive to the intended parent to seek surrogate mothers outside of their home country, such as higher prices, legality of surrogacy, waiting times, practice being banned for same-sex couples, scarcity of donors or surrogates, commercial sperm, egg/embryo donation and surrogacy being not allowed in some countries (Italy, Germany, and the Netherlands); upper-age limit for accessing fertility treatments; shortage of donor eggs due to new requirements for identity disclosure (as in the UK), or the general belief that quality of care might be better in the foreign country. Similarly, there exist 'pull' factors which are reasons why some countries attract surrogate tourists, which may be structural, legal, socio-economic and marketing reasons, while other pull factors may be lax laws, easier and greater access to women eager to make money by either selling their eggs or by renting out their womb to bear somebody else's child, cost differential, no upper age-limit, confidentiality, little to no waiting time, greater access to heterogenous couple and single men/women (Gupta, 2012).

Ban on commercial surrogacy may be one of the biggest 'push' factors that motivates future parents to seek surrogacy opportunities abroad. Surrogacy laws, needless to mention, vary from country. What makes this even more complex is the fact that surrogacy can be of two types depending on the intention: altruistic or philanthropic and commercial. Altruistic surrogacy does not involve any compensation (other than hospital, medical and incidental expenses) to the surrogate mother who carries the baby purely for philanthropic reasons. Commercial surrogacy, on the other hand, as the name suggests, involves compensation for the surrogate mother in exchange for the services rendered (Saxena et al., 2012; Storey, 2000; Thornton, 2015). For example, Italy, Spain, France, Portugal, Bulgaria and Germany ban surrogacy in any form whatsoever, but the US (variable by state), UK, Canada, Australia (variable by state), Denmark, Greece, India, Mexico (Mexico City, variable by district), Norway, Spain, Sweden, Switzerland allow altruistic surrogacy, which is completely banned in China, Germany, Italy, and Japan. Ukraine, on the other hand, allow both commercial and altruistic surrogacy. Russia and some US states allow commercial surrogacy. Finally, the UK, Australia (variable by state), Canada, China, France, Germany, Greece, Israel, Italy, Japan, Netherlands, Norway, Spain, Sweden, and Switzerland completely ban commercial surrogacy (Armour, 2012). Even subtler issues such as anonymous DNA donation are permitted in certain countries while banned in others.

Cost may be one of the biggest factors why many countries 'pull' would-be parents in the form of surrogacy tourism, such as India, Thailand and Ukraine. In India, it costs anywhere between \$20,000-\$30,000, including the two round-trip air tickets, surrogate's fee, fertilization expenses, delivery of the baby, hotel stays etc., as compared to about \$100,000-\$150,000 or more in the US or other Western countries (Gupta, 2012; Ghosh, 2006). It may, however, be noted that India banned commercial surrogacy in August, 2015 (Pande, 2021).

Another 'pull' factor that has popularized surrogacy tourism is the altruistic attitude in other non-Western countries, where women are more likely to donate their eggs for surrogacy or research purposes (for in-vitro fertilization or IVF, for example) rather than for monetary purposes, as exemplified by the following three quotes: "I would be willing to donate; no monetary compensation is required" and "We haven't reached that extreme stage

of commercialization,” and “We will donate if IVF is successful in our case. Somebody else’s life will be made” (Gupta, 2012).

Promotion and Marketing Consequences

As our research suggests, both push and pull factors have contributed to the explosive popularity of pregnancy tourism as a tool for those who want to avail of the benefit of being a parent through a surrogate mother. It is no surprise, therefore, that marketers and other stakeholders (fertility clinics, travel agents, transport operators, hospitals, agents, insurance companies and even banks and law firms) have leveraged their respective expertise to maximize the financial benefit of this trend. Specifically, some NGO-s even recruit potential surrogates under the garb of providing ‘help’ to protect them from their disapproving neighbors or relatives (Deepa et al., 2013). Such agencies have found considerable support from other marketing tools such as ubiquitous websites, local cable and radio channels that draw potential parents and surrogate mothers towards hospitals with whom they have contractual tie-ups, as well as billboards at prominent locations, bus stops etc. (Nadimpally and Venkatachalam, 2016). We notice a certain strategy that these agencies use to promote surrogacy births: first, infertility is considered as a shortcoming of women; being unable to bear a child is touted as being unable to achieve one’s cherished full ‘womanhood’ (whereas in reality, it is no different from any other medical condition) which is likely result in social ostracization and stigmatization, especially in conservative societies; secondly, the entire process of surrogacy is vociferously marketed as ‘rewarding’ and ‘stress-free’ for both the donor and the surrogate—when in reality, ART procedures can not only lead to failures but also health complications, mental trauma and depression (Sarojini and Sheno, 2011).

Research brings to light several other trends in how ART is marketed. Despite only a 25% ‘take home baby rate’ (Nadimpally and Venkatachalam, 2016), this procedure is advertised as ‘safe’ and stress-free’. Secondly, even though academic research indicates that both the sexes have an equal stake and may be responsible for infertility and unwillingness to bear a child, the blame, somehow, appears to shift on to women. This is especially noticeable in medical discourse, where the woman’s body is considered to be the primary reason for infertility, thereby requiring medical intrusion (Martin, 2001; Rowland, 1992). In other words, the marketing machinery has successfully commercialized the ART process to such an extent where women’s bodies have been reduced to mere machinery parts that are capable of giving birth whenever and wherever the need be, provide the right amount of money changes hands.

Such practices also pose a serious threat to women’s intellectual capability, makes them physically vulnerable and commodifies one of the most beautiful events on earth, i.e., childbirth. The current marketing and promotion tactics adopted objectifies women as mere ‘products’ available for transaction, and often glorifies physical characteristics as cherished criteria for surrogacy. Consider, for example, an actual ad in a local newspaper: “Looking for a healthy, good looking lady from a decent family for egg donation/surrogate mother. Attractive features and good education are desirable. Confidentiality, good facilities and reward assured. Apply Box No. 1317, C/o WOMEN’S ERA, New Delhi—110055” (Sama, 2010).

It is beyond question, therefore, that there needs to be strong oversight both from the regulatory authorities including (but not limited to) government, law enforcement, NGO-s and the medical fraternity to prevent unscrupulous marketing practices that promote unsafe and unethical ART as a business. In addition, women, especially those who are more vulnerable than others due to their social and financial backgrounds, need to be properly educated. There needs to be a concerted effort to make women aware of their rights and responsibilities, as well as both the potential benefits and risks of childbirth through surrogacy. Men need to be educated as well, so they are aware of what they should or should not promote or encourage, with the eventual expectation that in the future they will desist from regarding only their female counterparts as being responsible for infertility. It is difficult to believe that even in this day and age of women’s liberation and gender equality, women’s freedom, health and safety are being compromised in the garb of ‘joy of motherhood’.

Future Directions

Brinsden (2004) argues that we have a lot of work to do if we want to make Assisted Reproductive Technology a rewarding, healthy and safe experience for both the donor parent and the surrogate mother. The problem needs to be addressed on several fronts. On the medical side, there should be more rigorous rules and guidelines that will clearly demarcate who can and cannot become a future parent or a surrogate mom for e.g., age, health, social framework, existing and past parental issues, if any, the seriousness or criticality of the situation etc.

From a regulatory perspective, there can not only be more rigorous oversight on a country-basis, but also better coordination and collaboration among countries so as to prevent illegal pregnancy tourism. This acquires greater significance because it is more difficult to catch and convict perpetrators of illegal ART procedures. Speaking from a social and cultural standpoint, the government, social service organizations and NGO-s as well as other relevant institutions must undertake a concerted campaign to eradicate the 'stigma' of inability to bear a child, and educate both men and women of the ethics, rights and responsibilities of surrogacy motherhood. Specifically, all stakeholders must understand and appreciate that human body(parts) are not for sale and women should not be considered as commodities for sale in a market dictated by the laws of demand and supply. The author strongly believes that such measures can offer a healthy and ethical option to future parents –while, at the same time, provide an option for fertile women to offer their services for an altruistic cause.

Limitations

The author based the current analysis on extant research, because attempts to survey surrogate mothers as well as women to have availed the services have failed. Typically, it is very difficult to locate users of ART due to privacy concerns. Even when the author was able to track down a few willing survey respondents, they were prevented from participation by their family members. The author believes that if future research can be conducted using primary data especially an ethnographic study, then we may be able to shed more light on the psychosocial aspects of surrogacy motherhood.

References

- Armour, Kim. L. (2010). An Overview of Surrogacy Around the World: Trends, Questions and Ethical Issues, *Nursing for Women's Health*, Volume 16, Issue 3, 2012, Pages 231-236, <https://doi.org/10.1111/j.1751-486X.2012.01734.x>.
- ART Success Rate, accessed at <https://www.cdc.gov/art/artdata/index.html#:~:text=Based%20on%20CDC's%202019%20Fertility,and%2083%2C946%20live%20born%20infants>. On February 24, 2022
- Barat, Somjit (2021): Medical Tourism in India and Thailand: A Conceptual Model, *Journal of Business Leadership*, January, 2021.
- Barat, Somjit (2021): Looking at the Future of Medical Tourism in Asia, *International Journal of Tourism and Hospitality Management in the Digital Age*, DOI: 10.4018/IJTHMDA.2021010102; <https://www.igi-global.com/article/looking-at-the-future-of-medical-tourism-in-asia/267925>
- Barat, Somjit (2020): Attitudes of the Indian Middle Class: A Theory of Planned Behavior Approach, published in *Athens Journal of Business & Economics*, July, 2020, available at <https://www.athensjournals.gr/business/2020-3451-AJBE-Barat-05.pdf>
- Binoy, T. A. (2018). "An evaluation of surrogacy tourism in India- A study on ethical and legal perspective", *International Journal of Current Research*, 10, (02), 65160-65163.
- Bookman, M.Z. and Bookman, K.R. (2007), *Medical Tourism in Developing Countries*, Palgrave Macmillan, New York, NY.
- Bophela, M. J. K. (2022). Analysing Stokvels Development Through the Lens of Layered Conceptual Framework. *Technium Social Sciences Journal*, 29, 458-470.
- Brinsden, P. R. (2004). Gestational surrogacy. *Textbook of assisted reproductive techniques*, 875-886.
- CDC ART Success Rates (ND); accessed at <https://www.cdc.gov/art/artdata/index.html#:~:text=for%20future%20use.-,Although%20the%20use%20of%20ART%20is%20still%20relatively%20rare%20as,yar%20are%20conceived%20using%20ART> on September 6, 2022.

- Camerota, A. (2022): What I learned about the 'baby business' more than 15 years after undergoing IVF; CNN opinion, accessed at <https://www.cnn.com/2022/09/05/opinions/baby-business-after-going-through-ivf-camerota/index.html> on September 6, 2022.
- Cheung, H. (2014). Surrogate babies: Where can you have them, and is it legal?; BBC News, accessed at <https://www.bbc.com/news/world-28679020> on September 1, 2022.
- Crooks, V.A., Ormongd, M. and Jin, K.N. (2017), "Reflections on 'medical tourism' from the 2016 global healthcare policy and management forum", BMC Proceedings, Vol. 11 No. 8, pp. 1-4.
- Deepa, V., Rao, M., Baru, R., Bisht, R., Sarojini, N., & Murray, S. (2013). Sourcing Surrogates.: Actors, Agencies and Networks. Zubaan Books.
- Donchin, Anne. 2011. In whose interest? Policy and politics in assisted reproduction. *Bioethics* 25 (2): 92–101.
- Donchin A. Reproductive Tourism and the Quest for Global Gender Justice. *Bioethics*. 2010;24:323–332. doi: 10.1111/j.1467-8519.2010.01833.x
- Dutta S., Sarkar S. Towards a Humane Approach to Surrogacy. Business Standard; Delhi, India: 2016. Last Updated: 17 November 2016
- Ghosh, A. 2006. Cradle of the world. The Hindustan Times, 24 December.
- Ghosh, J. 2006. Rent-a-womb: The latest Indian export, 10 November. <http://www.MacroScan.com>
- Gupta, J. (2011). Exploring appropriation of "surplus" ova and embryos in Indian IVF clinics. *New Genetics and Society* 30 (2): 167–80.
- Gupta, J. A. (2012). Reproductive biocrossings: Indian egg donors and surrogates in the globalized fertility market. *International Journal of Feminist Approaches to Bioethics*, 5(1), 25–51. <https://doi.org/10.2979/intjfemappbio.5.1.25>
- Hale, A. J., Ricotta, D. N., Freed, J., Smith, C. C., & Huang, G. C. (2019). Adapting Maslow's hierarchy of needs as a framework for resident wellness. *Teaching and learning in medicine*, 31(1), 109-118.
- Hopper, E. (2020). Maslow's hierarchy of needs explained. ThoughtCo, ThoughtCo, 24.
- Independent Lens accessed at <https://www.pbs.org/independentlens/blog/surrogacy-facts-and-myths-how-much-do-you-know/> on February 24, 2022
- Martin, E. (2001). *The woman in the body: A cultural analysis of reproduction*. New York: Beacon Press.
- McLeod, S. (2007): Maslow's Hierarchy of Needs, accessed at <https://www.simplypsychology.org/maslow.html> on August 24, 2022
- Medhekar, A., Wong, H. Y., & Hall, J. E. (2019). Factors influencing inbound medical travel to India. *Journal Of Health Organization And Management*, 33(2), 155-172.
- Modern Family Surrogacy Center visited at <https://www.modernfamilysurrogacy.com/surrogacy-statistics> on February 24, 2022
- Nadimpally, S., & Venkatachalam, D. (2016). Marketing reproduction: assisted reproductive technologies and commercial surrogacy in India. *Indian Journal of Gender Studies*, 23(1), 87-104

- Naik, N. T. K., & Lal, B. S. (2013). Economic analysis of Indian medical tourism: international healthcare destination. *International Journal Of Business Management, Economics And Information Technology*, 5(2), 259-77.
- Pal, B. (2019). Surrogacy: Renting Wombs & Desire of Parenthood. *LexForti Legal J.*, 1, 93.
- Pande, A. (2021). Revisiting surrogacy in India: domino effects of the ban. *Journal Of Gender Studies*, 30(4), 395-405.
- Pande, A. 2009. Not an “angel,” not a “whore.” *Indian Journal Of Gender Studies* 16 (2): 141–73.
- Panitch, V. (2013). Surrogate Tourism and Reproductive Rights. *Hypatia*, 28(2), 274–289. <http://www.jstor.org/stable/24542121>
- Paul, A. (2002). Sexual selection and mate choice. *International Journal Of Primatology*, 23(4), 877-904.
- Piersanti V, Consalvo F, Signore F, Del Rio A, Zaami S. Surrogacy and "Procreative Tourism". What Does the Future Hold from the Ethical and Legal Perspectives?. *Medicina (Kaunas)*. 2021;57(1):47. Published 2021 Jan 8. doi:10.3390/medicina57010047
- Reroń, A. (1995). Maternal instinct in women with complicated pregnancy. *Ginekologia Polska*, 66(1), 13-18.
- Rogan, F., Shimed, V., Barclay, L., Everitt, L., & Wylli, A. (1997). ‘Becoming a mother’—developing a new theory of early motherhood. *Journal Of Advanced Nursing*, 25(5), 877-885.
- Rowland, R. (1992). *Living laboratories: Women and reproductive technologies*. Bloomington: Indiana University Press.
- Rubin R. (1984) *Maternal Identity and the Maternal Experience*. Springer, New York.
- Ruhe, K., van den Hoogen, A., Bröring-Starre, T., Wielenga, J. M., & van Weissenbruch, M. M. (2022). Getting a grip in the middle of chaos: Preparing for preterm parenthood during a high-risk pregnancy—Parental experiences and needs. *Acta Paediatrica*.
- Sarojini, N., Marwah, V., & Sheno, A. (2011). Globalisation of birth markets: a case study of assisted reproductive technologies in India. *Globalization And Health*, 7(1), 1-9.
- Saran J, Padubidri JR. New laws ban commercial surrogacy in India. *Med Leg J*. 2020 Sep;88(3):148-150. doi: 10.1177/0025817219891881. Epub 2020 Mar 27. PMID: 32216696.
- Saxena, P., Archana Mishra and Sonia Malik (2012) .Surrogacy: ethical and Legal Issues, *Indian Journal of Community Medicine*, Issue 37(4), pp211-213.
- Statista(<https://www.statista.com/statistics/241535/percentage-of-childless-women-in-the-us-by-age/#:~:text=In%202018%2C%2096.9%20percent%20of,44%20years%20old%20were%20childless.&text=As%20of%202018%2C%20a%20little,in%20the%20U.S.%20were%20childless>)
- Stertz, A. M., & Wiese, B. S. (2020). Child-related bliss and couples’ partnership satisfaction in the early parenthood period: A longitudinal dyadic perspective. *Journal of Family Psychology*, 34(8), 1046.
- Storey, G. P. (2000). Ethical problems surrounding surrogate motherhood. *Bioethics*, 2, 5.
- Thornton, G. (2015). Indian medical tourism industry to touch \$8 billion by 2020. *The Economic Times*.
- Walsh, A. (2017). *Love: The biology behind the heart*. Routledge.

- Werner-Bierwisch, T., Pinkert, C., Niessen, K., Metzger, S., & Hellmers, C. (2018). Mothers' and fathers' sense of security in the context of pregnancy, childbirth and the postnatal period: an integrative literature review. *BMC pregnancy and childbirth*, 18(1), 1-16.
- Williams Veazey, L. (2018). The turbulent emotions of early parenthood. In *Paths to Parenthood* (pp. 119-143). Palgrave Macmillan, Singapore.
- Wilder, J. L., Pingree, E. W., Hark, C. M., Marcus, C. H., Rabinowitz, E. C., Michelson, C. D., & Winn, A. S. (2021). Pediatric trainees as parents: perspectives on parenthood from pediatric resident parents. *Academic Pediatrics*, 21(6), 934-942.

Full Paper

Food Trucks on the Move: Understanding Generational Differences in Dining Choices

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Eating habits in the U.S. are shifting in ways that are sometimes surprising. More people are turning to locally owned food trucks rather than traditional sit-down restaurants. For many, this change comes from busy schedules, urban lifestyles, or simply curiosity to try something new. Food trucks offer flexible dining, a wide variety of menus, and often lower prices. Their mobility also allows them to serve different locations during the week, which adds to their appeal. Beyond these practical advantages, they frequently create a lively, social environment that makes eating out more of an experience than just a meal. Over the past decade, food trucks have quietly grown, claiming a portion of the market once held by conventional restaurants. In conversations with local operators, we observed that many customers are drawn as much by the social atmosphere as by the food itself.

Relatively little is known about what drives people to choose food trucks, particularly across generations. Age can influence choices in several ways—technology habits, work schedules, social routines, and food preferences all matter. Younger groups, such as Millennials and Gen Z, may prioritize novelty, convenience, and social experiences, while older groups often value consistency, quality, and reliability. Observing these trends helps us understand how dining behavior is evolving across the population.

To explore these patterns, this study will survey individuals aged 18 and older, examining generational differences in food truck dining. Using a quantitative survey, we will collect information about attitudes, intentions, and reported behaviors, paying special attention to age-based patterns. Guided by the Theory of Reasoned Action (Ajzen, 1991), the research examines how attitudes, social influences, and intentions influence food choices. This framework provides insight into why certain generations may be more drawn to food trucks than others.

Survey questions will cover convenience, price sensitivity, menu variety, social influence, and overall satisfaction. Comparing results across age groups will reveal both similarities and differences. For instance, younger participants might value social media posts and trendy menu items, whereas older participants may emphasize consistency and trusted flavors. By incorporating these findings, food truck operators can better design menus, plan locations, and engage customers more effectively.

Beyond generational comparisons, the study contributes to understanding informal dining and mobile food services. Food trucks combine entrepreneurship, mobility, and culture, making them a compelling lens for examining changes in dining trends. Insights from this research will be useful to operators aiming to reach diverse customers and to scholars studying evolving consumer behavior. Including specific observations from local food events adds context that helps ground the study in real-world experience.

In short, food trucks reflect broader changes in how people eat, emphasizing flexibility, convenience, and experience. By examining generational differences, this study fills a research gap and offers practical guidance for operators while adding to academic knowledge. Surveying a broad age range allows us to see which patterns are shared and which vary between generations. We anticipate the results will support decision-making for operators and enhance understanding of shifting dining habits. Ultimately, this research highlights how mobile food services are reshaping the dining landscape and lays a foundation for future studies on innovation, consumer choice, and generational impact.

Keywords: food trucks, generational differences, Theory of Reasoned Action, consumer behavior, dining trends, informal dining, mobile food vendors, market segmentation

**SESSION 31.7: PANEL: THE MUSES: AN ANALYSIS OF
MARKETING THROUGH ANALOGY**

Panelists:

R Wixel Barnwell

Ken Graham

Alisha Horky

Becca Jones

Michael Levin

Shannon McCarthy

Alec Slepchuk

Mark Pelletier

Special Session

The Muses: An Analysis of Marketing through Analogy

R Wixel Barnwell, Longwood University, USA
Kenneth Graham, University of Wisconsin-La Crosse, USA
Alisha Horky, University of North Alabama, USA
Becca Jones, Georgia Southwestern State University, USA
Michael Levin, University of Louisiana at Lafayette, USA
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Alec N Slepchuk, University of Louisiana at Lafayette, USA

The Analysis by Analogy Panel Series goes back to 2014. Creativity inspired by the intersection of disparate disciplines (Johannson, 2004) and the relevance of analogy in deepening understanding are well-documented (Hofstadter & Sander, 2013). The daughters of the Titaness Mnemosyne, the goddess of memory, and Zeus, the Muses of classical Greece, were mythical personifications of different areas of artistic endeavor (d'Aulaire, I., & d'Aulaire, E. P., 2017). Each muse was considered the inspirational source of these arts. The presenters of this panel will draw parallels between the concepts these Muses personify and current marketing issues and opportunities, with the aim of revealing new truths through the lens of analogy.

Calliope, the muse of heroic or epic poetry, was thought to inspire tales of heroic journeys and grand purpose. This is not unlike marketers who craft narratives that position the product as the hero, solving the consumer's challenges. This mythic framing elevates the brand story, engaging audiences through timeless arcs of struggle, triumph, and transformation.

Clio was the muse of history, and her sister, Polymnia, was the muse of mimicry and imitation, among other arts. In this way, these two muses represent the influences of both nostalgia, a longing for the past, and the urge to mimic this imagined past through retro-marketing.

Erato, the muse of lyric and love poetry, inspires marketers to use emotional storytelling and deep audience connection by inspiring campaigns that evoke intimacy, desire, and personal resonance. Her symbolism encourages marketers to use creative narratives and personalized strategies to build lasting customer relationships and brand loyalty.

Euterpe, the muse of music, enables marketers to influence consumers' moods and motivate their behaviors. Marketers leverage the elements of music, including tempo, rhythm, melody, pitch, and harmony, to prime thoughts, feelings, and associations in the mind of the consumer. These gifts of Euterpe help connect products and brands with strong emotional triggers that can influence consumer decision-making.

Melpomene, the muse of tragedy, should be the muse of Marketing when nearly 70% of product launches are off the market within three years. At the product level, the shakeout literature provides some insight, but not at the firm level. Instead, we should look at the organizational failure and organizational death streams from finance and management, respectively, to develop our understanding of detecting when a firm will fail, as marketing's role in firm failure.

Terpsichore, the muse of dance, invites us to see marketing as a choreography of social change. Through emotional and physical engagement, consumers become part of collective movements whose rhythms shape transformative action and influence public policy.

Thalia, the muse of comedy, is the power of laughter made manifest. Laughter and humor are two of marketing's most powerful tools, because once consumers are laughing and nodding their head, they are one step closer to remembering, agreeing, and perhaps purchasing.

Urania, the muse of astronomy, reminds marketers that data without direction is just stargazing. With her globe and compass in hand, Urania nudges us toward logic, clarity, and strategic alignment, three things too often missing in marketing today. Under her watch, we stop orbiting vague ideas and land on something meaningful but still wrapped in emotion.

References

- d'Aulaire, I., & d'Aulaire, E. P. (2017). *D'Aulaires' book of Greek myths*. Doubleday Books for Young Readers.
- Hofstadter, D. R., & Sander, E. (2013). *Surfaces and essences: Analogy as the fuel and fire of thinking*. Basic Books.
- Johansson, F. (2006). *The Medici Effect: Breakthrough Insights at the intersection of ideas, concepts, and cultures*. Harvard Business School Press.

SESSION 31.8: METAMORPHOSIS IN THE MARKETPLACE

Moderators:

Ash Zareian

Summary Brief

From Street to Status: The Price Premium Dynamics of Luxury Streetwear in Resale Markets

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This study investigates the factors shaping the growth of resale culture and the determinants of product value in secondary markets for limited-edition streetwear. Drawing on data from Supreme and other brands across the luxury spectrum, the research examines how scarcity, brand collaboration, logo visibility, and social media engagement influence resale prices. Early findings suggest that cultural signaling, perceived exclusivity, and selective consumer demand are central to value creation. The results contribute to understanding how branding strategies and digital hype cycles transform products from retail goods into speculative assets within the resale economy.

Introduction

Streetwear, a style rooted in skateboarding, hip-hop, and youth counterculture, has evolved into a dominant global fashion category, blending casual apparel with elements of exclusivity and luxury (Moreno, 2020). Among its most iconic brands, Supreme stands out as a pioneer in transforming streetwear from niche subculture to high-end collectible. Founded in 1994 as a skate shop in New York City, Supreme built its reputation through guerrilla marketing, limited weekly “drops,” and collaborations with artists, designers, and luxury fashion houses (Brennan, 2024). These practices have created a perception of scarcity, making Supreme products both cultural symbols and economic assets. A distinctive feature of this market is the dramatic price escalation between retail and resale. Many Supreme items sell out online or in-store within minutes of release, only to reappear on secondary markets at several times their original price. This phenomenon is not unique to Supreme but reflects a broader shift in consumer behavior in the streetwear and sneaker categories. The “hype” surrounding limited releases is amplified by social media platforms and facilitated by resale marketplaces such as StockX and eBay, which have transformed once-informal peer-to-peer trading into highly organized, data-driven markets (La, 2023; Lavonsalo, 2023). These platforms provide transparent pricing histories, authentication services, and global reach, further legitimizing resale as both a form of consumption and investment.

Background

Supreme’s collaborations with high-profile partners such as Louis Vuitton have blurred the boundaries between streetwear and luxury fashion, reinforcing brand prestige and increasing consumer willingness to pay (Chiaudano, 2022). Collaboration quality and brand alignment appear to be critical factors in driving resale value. When Supreme partners with brands that share similar cultural credibility, such as Nike, or with heritage luxury houses, the resulting products often gain immediate desirability in both primary and secondary markets. This alignment strengthens the perceived authenticity of the product and signals that it belongs to a high-status consumption category (Han, Nunes, & Drèze, 2010; Sanja, Anne, & Marina, 2022). On the other hand, collaborations with less culturally aligned or mass-market brands may generate less resale momentum, as the signal of exclusivity is weaker. Logo visibility is another influential factor. Prominent logos function as visible markers of status, allowing owners to signal their membership in desirable subcultures. Products with bold, recognizable branding can command a higher premium in the resale market because they make the status signal more overt (Keller, 2003).

Social media engagement plays an equally important role in resale pricing dynamics. In the hours and days following a product “drop,” Instagram, TikTok, and other platforms often serve as amplifiers of hype, creating a rapid feedback loop between potential buyers, influencers, and resellers (Barari, Eisend, & Jain, 2025). Positive or viral reactions can generate a perception of scarcity and urgency, encouraging resale buyers to pay a premium before prices climb further (La, 2023; Lavonsalo, 2023). Resellers actively monitor these reactions as early indicators of

which products will appreciate most quickly. In this environment, signaling theory offers a useful lens for understanding buyer and seller behavior. Brand cues such as collaboration partner, logo placement, and early online buzz reduce uncertainty about an item's desirability, allowing resellers to confidently invest in select products (Fernandes, Guzman, & Mota, 2024). This behavior creates a "unicorn" effect, where a small number of items achieve extreme price jumps while most still experience modest appreciation. Such dynamics parallel venture capital models, where a few high performers account for a disproportionate share of returns. The intersection of cultural capital, digital engagement, and scarcity-driven marketing ensures that limited-edition streetwear functions not only as fashion but also as a form of speculative asset.

Methods and Initial Results

This study draws on an original dataset of 218 Supreme product releases from a single season, recording variables related to product characteristics, collaboration details, brand signaling, and social media engagement. Key measures include product category, retail price, placement on the release page, collaboration presence, identity of the collaborating brand, and a coded measure of brand alignment. Visual branding elements are captured through binary indicators for the presence of the Supreme logo, ordinal scores for logo prominence, and data on any additional brand logos. Social media activity is measured by the number of likes, dislikes, and the proportion of positive interactions within 48 hours of release. Resale market performance is assessed through the average resale price within 7 to 14 days post-release, absolute and percentage changes from retail price, and, when available, sell-out time in seconds. Data were cleaned to remove duplicates, categorical variables were converted to numerical codes, and missing values were addressed through listwise deletion. Pearson correlations were used to explore the relationships between resale percentage change and hypothesized drivers, including collaboration status, logo visibility, social media engagement, and retail price. While this initial analysis focuses on Supreme, the study will expand to include four additional brands spanning different market positions: Gucci, positioned above Supreme in the luxury hierarchy; BAPE, with a similar market profile; and Jordan, positioned at a lower price point.

The preliminary results reveal several important patterns. Collaboration status shows a small positive correlation with resale percentage change ($r = 0.08$), suggesting that partnerships may contribute to higher resale premiums, though the effect is modest in this sample. Social media likes are negatively correlated with resale percentage change ($r = -0.25$), indicating that high engagement does not necessarily predict greater relative resale gains. Retail price is strongly negatively correlated with resale percentage change ($r = -0.57$), implying that lower-priced items are more likely to appreciate significantly in relative terms, while resale price is strongly and positively correlated with retail price ($r = 0.90$), indicating that higher-priced items maintain their absolute value. Descriptive trends suggest that T-shirts and accessories, which occupy the lower end of the retail price range, are more likely to achieve substantial resale premiums, particularly when they combine strong logo visibility with culturally or commercially prestigious collaborations. These findings align with the "unicorn effect," where a small number of items generate disproportionately high returns in the resale market.

References

- Barari, M., Eisend, M., & Jain, V. (2025). How social media shapes luxury brand perception: The role of influencers, virality, and scarcity. *Journal of Interactive Marketing*. Advance online publication.
- Brennan, J. (2024). *Reigning Supreme: A study of brand power through Supreme New York and their impact on street culture* [Master's thesis, Institute of Art, Design + Technology]. IADT Research Repository.
- Chiaudano, V. (2022). *When consumers reshape luxury branding: The match of luxury with sustainability and streetwear* [Doctoral dissertation, University of Turin]. University of Turin Repository.
- Fernandes, C., Guzman, F., & Mota, F. (2024). Signaling strategies in luxury branding: How collaborations enhance perceived value. *Journal of Brand Management*, 31(1), 22–39.
- Han, Y. J., Nunes, J. C., & Drèze, X. (2010). Signaling status with luxury goods: The role of brand prominence. *Journal of Marketing*, 74(4), 15–30.
- Keller, K. L. (2003). *Strategic brand management: Building, measuring, and managing brand equity* (2nd ed.). Prentice Hall.

- La, M. (2023). *Beyond the sole: An exploration of affect, desire, and commodified Black masculinity in sneaker consumption* [Master's thesis, Simon Fraser University]. Summit Institutional Repository.
- Lavonsalo, A. (2023). *Secondhand sneaker purchasing in peer-to-peer markets* [Master's thesis, Aalto University School of Business]. Aalto University Repository.
- Moreno, A. M. (2020). *Hypebeast fashion: Why streetwear is the new luxury fashion* [Doctoral dissertation, Claremont McKenna College]. ProQuest Dissertations Publishing.
- Sanja, P., Anne, S., & Marina, M. (2022). Luxury collaborations: How brand alignment shapes perceived authenticity. *Journal of Business Research*, 142, 604–617.

Summary Brief

Eco-Friendly or Eco-Fuzzy? Label Effects on Perceived Ethicality, Taste Expectation, and Purchase Intentions

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External product attributes (e.g., labels) act as diagnostic cues that are used by consumers to form perceptions of products and brands. With the growth in consumer demand for products that take environmental impact into consideration, one such label that has increased in prevalence is “eco-friendly”. The eco-friendly label is unregulated in the United States – allowing for confusion and misinterpretation of product attributes by consumers. This research examines how the presence of an eco-friendly label impacts consumer perceived ethicality towards the product/brand, and in turn expectations of taste and purchase intentions. Perceived expensiveness is examined as a boundary condition.

Introduction

There are all kinds of food labels in the marketplace, that communicate a wide variety of information. The intentions of these labels also vary - such as protecting consumers (e.g., allergy labels), providing nutrition information (e.g., low fat, reduced sugar), and giving insight into production methods (e.g., organic). Despite the heavy involvement of the Food and Drug Administration (FDA) and United States Department of Agriculture (USDA) in controlling the human food supply and how food products are marketed to consumers, not all labels are regulated. This makes the use, the meaning, and the interpretation of these labels unclear. A growing area of labels appearing on food products relate to the overarching topic of environmentally friendly. For instance, existing labels related to being environmentally conscious include “Sustainable”, “Organic”, and “Eco-Friendly”. The term Organic is highly regulated, and its meaning is clearly defined as are the labels that are approved by the USDA. Eco-friendly however, is an unregulated term that can be used by any manufacturer and cause confusion amongst consumers since they may be purchasing a product with certain attributes that do not exist (Campbell et al., 2015).

Global food systems continue to undergo transformation driven by population growth and an increasing demand for more sustainable production methods (Galanakis, 2024). As concerns about climate change, resource depletion, and food security intensify, sustainable and eco-friendly foods are gaining attention as viable solutions (Galanakis, 2024). These concerns for the environment may make eco-friendly labels attractive to consumers, and act as a diagnostic cue that improves the perceived ethicality of the brand/product. Consumer perceived ethicality (CPE) is related to consumers believing the product is “good” or “bad” from a moral sense. The relationship between eco-friendly labels and consumer perceptions of ethicality remains underexplored. This research examines the relationship through a descriptive ethics lens to gain a stronger understanding of consumer perceived ethics of eco-friendly labels and the downstream consequences on taste and purchase intentions. Additionally, the boundary condition of perceived expensiveness is explored.

Background

Given that most food and beverage purchase decisions are made in-store, external product attributes such as packaging serve as salient cues informing consumer choice. Beyond its protective function, packaging plays a central role in shaping consumer perceptions and evaluations (Orlowski, Lefebvre, & Boman, 2022). When direct product information is limited and cognitive resources are constrained, such as when one is shopping in a busy supermarket, consumers rely heavily on packaging cues to infer unobservable characteristics such as taste, price, value, and healthfulness (Mai et al., 2016; Villa & Ampuero, 2006; Kumar et al., 2021; Olson & Jacoby, 1972). Packaging can also shape consumers’ perceptions of the company’s ethical standards. Visual and structural elements of packaging often serve as signals of corporate values such as environmental responsibility, transparency, and social equity. For example, packaging color can enhance or detract from consumers’ perceptions of a brand as socially responsible (Barchiesi, Castellan, and Costa, 2018). Further, consumers perceive brands that use natural-based fiber-

based packaging materials to be more environmentally friendly (Magnier and Schoormans, 2017). Pro-environmentally friendly packaging cues are especially pronounced for less familiar brands (Herédia-Colaço, 2023).

Consumer perceived ethicality is defined as “consumers aggregate perception of a subject’s (i.e., company, brand, product, or services) morality” (Brunk & Blümelhuber, 2011, p.134). When consumers perceive a brand as ethical, they attribute higher credibility, integrity, and trustworthiness to the brand (Singh, Igkessias, & Batista-Foguet, 2012). Visual cues, including logos, packaging, and imagery, play a critical role in shaping these perceptions, serving as heuristic signals of ethical behavior or corporate responsibility (Barchiesi, Castellan, & Costa, 2016; Hartmann & Apaolaza-Ibáñez, 2015; Pichierri & Pino, 2023; Sundar & Kellaris, 2017). For example, product packaging that is low in color saturation is perceived to be gentler in environmental impact, a perception that carries over to the brand, thus increasing purchase intentions (Pichierri & Pino, 2023). As consumers increasingly evaluate brands based on moral standards, effectively designed visual elements can help communicate a brand’s ethical stance clearly and rapidly, thus becoming an essential element in ethical brand positioning. We predict that the presence of an eco-friendly label increases consumer perceived ethicality, which creates a health halo of the product. The positive halo created by the label is transferred to the expected taste of the product – considered one of the most important attributes in purchase decisions. Thus, we predict:

H1: The presence (vs. absence) of an eco-label will have an indirect effect on purchase intentions through consumer-perceived ethicality and taste.

H2: The indirect effect of the presence of an eco-label on purchase intention through consumer perceived ethicality and taste is moderated by perceived expensiveness. Specifically, when the product is perceived as inexpensive (vs. expensive) the sequential mediation will be attenuated.

Key Findings

In Study 1, an experimental design with two conditions (eco-label: present vs. absent) was used to examine the primary prediction (H1) using Connect by CloudResearch. Participants were randomly assigned to review an image of a can of pumpkin puree that either had a green eco-friendly label (i.e., present) on the front or no label. The results find a significant effect of the eco-label (0 = absent, 1 = present) on consumer perceived ethicality ($a_1 = .334$, $p = .031$), which has a significant positive effect on taste ($d = .408$, $p < .001$). Finally, taste significantly influenced purchase intentions ($b = .875$, $p < .001$). In support of H1, the serial indirect was significant (effect = .119, 95% CI [.011, .278]).

Study 2 used a 2 (eco-label: present vs. absent) x 2 (expensiveness: low vs. high) between-subjects experimental design to examine expensiveness as a boundary condition. All participants reviewed an image of a packaged loaf of “nine grain bread” bread. In support of H2, the serial indirect effect was only significant when the price was perceived as expensive (effect = .331, 95% CI: .190 to .496), but not when the price was perceived as inexpensive (effect = .028, 95% CI: -.103 to .162). The index of moderated mediation was significant (index = .303, 95% CI [.118 to .519]).

The results provide support for the primary prediction that the presence of an eco-label significantly influences consumer purchase intentions indirectly through a positive effect on consumer perceived ethicality and taste expectations. Further, the serial mechanisms only explain the effect when consumer perceive the product to be expensive.

References available upon request.

SESSION 31.9: FROM SOCIAL APPS TO SMART FINANCE: DESIGNING ENGAGEMENT

Moderators:

Bo Dai

Full Paper

A Conceptual Model for Eye-Tracking Backer Attention to Creator and Crowd Signals with Demographic Moderation in Crowdfunding

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Crowdfunding has revolutionized entrepreneurial financing by enabling entrepreneurs to secure capital directly from diverse online backers. This study introduces the Crowdfunding Signal Response Model (CSRSM), leveraging signaling theory to explore how creator and crowd signals influence backers' funding decisions. Creator signals, such as campaign presentations and founder credentials, convey project quality and credibility, while crowd signals, like funding momentum and well-known backer presence, provide social proof. Using eye-tracking method, the model demonstrates how these signals capture visual attention and shape cognitive processing. The framework integrates demographic moderators, hypothesizing that these factors influence signal interpretation. While younger backers may prioritize crowd signals due to social conformity, older backers may focus on creator credibility. The CSRSM bridges signaling theory with neurocognitive insights, offering a nuanced understanding of decision-making in digital marketplaces like crowdfunding platforms. It proposes that stronger signals enhance investment intentions, with visual attention as a key mediator.

Introduction

Crowd wisdom represents collective intelligence which enables groups to make better predictions or decisions than those made by individual experts or average members. Crowd wisdom reaches its peak when diverse opinions combine with independent judgments and decentralized information processing. Crowd wisdom is heavily influenced by group characteristics (Davis-Stober et al., 2014; Lorenz et al., 2011; Surowiecki, 2005). Online investment communities benefit from crowd wisdom through factors like experience diversity and participant independence (Hong et al., 2020). Social interactions function within crowdfunding environments. Founders' active social engagement with the crowd leads to enhanced crowdfunding success by diminishing information asymmetry through ongoing dialogue. Similarly, Polzin et al. (2018) identify the key role of information heterogeneity together with the different information exchange while recommending customized information diffusion methods (Polzin et al., 2018). Investors continue to use some forecast signals for decision-making even though biases exist which show that crowds have only partial success in interpreting financial data correctly (Jo & Yang, 2021). Wisdom encompasses both cognitive abilities and emotional control along with empathy and the ability to adapt to different contexts (Weststrate et al., 2019). Quality and credibility signals reduce information asymmetries which helps groups make informed decisions through legitimate information sources. Transparent reliable information plays a vital role in the effective application of crowd wisdom (Connelly et al., 2011).

Crowdfunding represents a transformative change in how entrepreneurs finance their ventures by allowing startups and individuals to gain capital from a widespread audience instead of depending on conventional financial institutions. Reward-based crowdfunding has become a dominant force in changing initial capital fundraising methods for ventures and emphasizes the need for management research to study its cognitive and structural aspects (Belleflamme et al., 2014; Lagazio & Querci, 2018; Mollick, 2014). Previous research on crowdfunding has comprehensively explored six key areas: the determinants of campaign success (Belleflamme et al., 2014; Lagazio & Querci, 2018; Mollick, 2014); the role of perceived impact and campaign timing in shaping backers' decisions (Kuppuswamy & Bayus, 2017); the influence of cognitive biases such as herding and anchoring on funding behaviors (Herzenstein et al., 2011; Kuppuswamy & Bayus, 2017; Lin et al., 2013); the importance of interaction and communication between creators and backers in building trust (Wang et al., 2018); strategies for addressing information asymmetry to reduce uncertainty (Burtch et al., 2013; Courtney et al., 2017); and the multifaceted nature of crowdfunding success (Lagazio & Querci, 2018). This research reveals multiple essential elements that determine whether crowdfunding campaigns achieve success.

Signaling theory provides a foundational lens for understanding how information is conveyed and interpreted by potential backers (Spence, 1978). In crowdfunding, where backers often lack complete information about a project's quality, signals serve as indications to reduce information asymmetry and guide decision-making (Courtney et al., 2017; Steigenberger & Wilhelm, 2018). These signals can initially be sent from the project creator, such as campaign presentation, prior entrepreneurial experience, or timely communication, which deliver capability and reliability (Colombo et al., 2015; Connelly et al., 2011). Signals can also emerge from the crowd, such as rapid funding momentum, the number of backers, and endorsements from recognized individuals or organizations, which offer social proof and validity (Agrawal et al., 2015; Kuppuswamy & Bayus, 2017). Both creator and crowd signals act as informational transparency, enabling backers to make faster judgments about project credibility and potential success in the absence of direct verification. In crowdfunding environments, backers often engage in bandwagon behavior, where they rationally decide to follow the actions of others, assuming that the initial supporters may have better information (Rodríguez-Garnica et al., 2024). This can lead to information cascades, where the crowd's momentum becomes the dominant signal, overshadowing private assessments of the project (Vismara, 2018). Initial support, often from the creator's own social network of friends and family, signals trustworthiness and reliability, which in turn attracts supporters from the public (Agrawal et al., 2015). As a project approaches its funding goal, contributions often accelerate, a phenomenon known as the proximity effect, which stems from backers' perception that their contributions are more impactful (Kuppuswamy & Bayus, 2017). Thus, market dynamics themselves become a critical signal for investment decisions at later stages (Hornuf & Schwienbacher, 2018).

New improvements in eye-tracking technology give us strong tools to study how potential backers focus their attention in crowdfunding settings, a critical factor in decision-making under information scarcity (Malhotra, 2004; Stasi et al., 2018). Eye-tracking captures real-time gaze patterns, enabling researchers to identify which visual elements, such as layout, font size, color, and multimedia, attract attention and sustain engagement (Khushaba et al., 2013; Stasi et al., 2018). This approach has been widely adopted in consumer neuroscience for its ability to measure attention distribution, trust formation, and emotional response, and is increasingly combined with biometric measures such as EEG or GSR for deeper insight into cognitive and affective processing (Alsharif et al., 2021, 2023; Harris et al., 2018). In the crowdfunding context, these methods can reveal how design choices shape perceptions of credibility and influence funding intentions (Srivastava & Bag, 2024).

While the impact of creator and crowd signals is well established, the literature has paid less attention if all funders perceive and process these signals in the same way. Using eye-tracking technology, funders do not pay attention to all available signals; rather, their individual characteristics, such as their own human capital, influence which signals they even notice (Butticè et al., 2022). This shows the importance of signal reception and suggests that the effectiveness of a signal depends on the characteristics of the receiver. This paper extends this logic by suggesting that two main demographic characteristics, gender and age, act as key moderators in the signaling process.

The literature highlights significant gender differences in economic behavior and crowdfunding. Studies show that female entrepreneurs face biases, but they may also use unique communication styles to achieve success (Bapna & Ganco, 2021). From the backers' point of view, research suggests that the motivations and goals of participation differ between genders (Serwaah et al., 2024). These differences may stem from different levels of risk taking, social motivations, or the importance of relational and transactional information. As a result, it is highly likely that male and female backers differ in how they weight creator signals versus collective signals.

Age is also a critical moderator. This is correlated with investment experience, cognitive processing styles, and vulnerability to social influence. Older backers may use deeper experience to critically evaluate a creator's claims, while younger backers, who are often more engaged in digital social networks, may be more sensitive to social proof and crowd. Recent studies have examined how age moderates adoption in crowdfunding (Laaouina et al., 2024), supporting the notion that differences can shape financial decision-making in these new contexts. Ignoring these demographic moderators leads to an incomplete and overly model of backer behavior.

Therefore, this conceptual paper aims to combine signaling theory, crowd behavior, and demographic studies, into a single, integrated framework. We go beyond asking whether signals matter to asking how and to whom they matter. The main goal of this study is to develop a conceptual model that explains how different

campaign signals influence backers' decisions, with a particular focus on the moderating roles of backers' age and gender. This leads to our main research question:

How do different campaign signals influence backers' decisions to contribute in crowdfunding campaigns, and how are these effects moderated by backers' demographic characteristics?

This paper introduces the Crowdfunding Signal Response Model (CSRM), a conceptual framework that integrates signaling theory, visual attention metrics, and demographic moderation to explain how different signals influence backer funding intentions. The model proposes that (1) stronger creator and crowd signals increase perceived credibility and popularity, (2) visual attention mediates the relationship between signal strength and funding intention, and (3) age and gender moderate these effects. By combining theoretical insights with neurocognitive measurement, the CSRM advances a more nuanced understanding of backer behavior and provides actionable guidance for entrepreneurs during their crowdfunding campaign.

Literature Review

Crowdfunding campaign success depends on the quality signals of preparedness along with personal networks and geographic origin. Quality signals function to decrease information asymmetry between project backers and creators which remains a principal issue in online financial transactions (Mollick, 2014). Crowdfunding is a bootstrapping activity which combines community-driven motives with financial rewards (Belleflamme et al., 2014). Crowdfunding success attributes including team size, campaign duration, and narrative richness (Lagazio & Querci, 2018). Crowdfunding backers demonstrate increased likelihood of contributing when a project approaches its funding goal. The impact increases as deadlines approach or when projects start with less momentum demonstrating that cognitive perception alongside rational evaluation directs backer behavior (Kuppuswamy & Bayus, 2017). Backers use cognitive processes which extend beyond rational thinking. The decision-making of backers is heavily influenced by cognitive biases such as anchoring and herding (Lin et al., 2013). Storytelling combined with a sense of familiarity builds trust while establishing emotional bonds which affect funding results through narrative influence (Herzenstein et al., 2011). In uncertain situations emotional engagement functions as a cognitive shortcut which shapes how support spreads (Kuppuswamy & Bayus, 2017). Dynamic interactions between creators and backers prove to be essential along with static campaign attributes. Project creators who respond promptly with detailed comments boost their chances of obtaining funding. The perception of interactivity functions as a cognitive method to build trust in unpredictable online contexts according to (Wang et al., 2018). Crowdfunding platforms inherently suffer from information asymmetry. Signaling theory works by using third-party validation as an alternative to formal institutional assurances within digital environments (Courtney et al., 2017). Similarly, backers use early contributions as an indicator of project trustworthiness (Burtch et al., 2013). Campaigns reach success through strategic planning and their capacity to connect emotionally and socially with audiences. Research shows that cognitive heuristics along with affective responses enable backers to manage uncertainty and information scarcity (Lagazio & Querci, 2018).

Signaling Theory in Crowdfunding

The emergence of crowdfunding as a channel for entrepreneurial financing has stimulated a large amount of research lead to figuring out the key factors of campaign success (Huang et al., 2022; Lagazio & Querci, 2018). A challenge in this digital marketplace is the widespread information asymmetry between project creators and potential backers (Ahlers et al., 2015). To overcome this challenge, a theoretical anchor explains how entrepreneurs transfer credibility and how backers make informed decisions with limited data. Signaling theory is an important framework for this purpose, providing a lens for understanding the communication of unobservable characteristics through observable cues (Connelly et al., 2011, 2025; Spence, 1978). This review extend literature on crowdfunding signals, which contains two main signal sources, the creator and the crowd. It is also, argue that the interpretation of these signals is not universal, but depends on the demographic characteristics of the receiver, especially their gender and age, that providing the context for the main conceptual contribution of this paper.

Signaling theory explains how one party, the sender, express credible information about their unobservable quality to another party, the receiver, through the use of observable signals (Kaminski & Hopp, 2020; Scheaf et al., 2018; Steigenberger & Wilhelm, 2018). The effectiveness of this theory is based on the principle of signal cost, for example for a signal to be honest and trustworthy, it must be less costly to produce it by a high-quality sender than to imitate it by a low-quality sender (Connelly et al., 2011). This cost difference makes the signal a valid indicator for the sender's actual quality. In the context of crowdfunding, entrepreneurs are senders who gather a set of signals on

their campaign page to convince a population of non-expert supporters, the receivers, of the quality of their investment (Courtney et al., 2017). The literature has categorized these signals into two main streams, those constructed by the creator and those that come from the actions of the population.

Attention Measurement in Crowdfunding

The development of eye-tracking technology has established itself as an influential approach to study visual attention which plays a crucial role in consumer decision-making processes particularly under complex conditions such as crowdfunding environments (Butticè et al., 2022). The use of eye-tracking methods in marketing and consumer research helps researchers study visual attention distribution among individuals and its effects on decision-making processes (Malhotra, 2004). The visual presentation of crowdfunding projects including layout choices, font size selections, color schemes, and multimedia content proves essential for gaining early viewer interest. Through eye-tracking researchers can identify visually prominent elements and examine their effects on trust, emotion and user engagement (Khushaba et al., 2013; Stasi et al., 2018). The importance of visual elements in crowdfunding arises from backers having to make fast decisions with minimal information while depending primarily on visual processing to develop their initial assessments (Malhotra, 2004; Stasi et al., 2018). Further, eye-tracking technology serves as a beneficial instrument within consumer neuroscience because of its temporal resolution capabilities and its real-time attention tracking functionality. Eye-tracking becomes especially effective for investigating cognitive and emotional processes when used in conjunction with EEG or GSR measurements (Harris et al., 2018). The same concept holds true for crowdfunding campaigns because how project descriptions and reward options are presented can affect both the perception of potential backers and the probability of receiving funding. Determining which elements of a campaign draw initial attention or maintain viewer engagement produces important feedback for design purposes (Stasi et al., 2018). Research shows an increasing movement toward integrating eye-tracking technology with biometric and neurological measurement devices. Eye-tracking as one of the leading physiological tools used in neuromarketing studies because it effectively measures attention spans, memory retention, and motivational levels (Alsharif et al., 2021, 2023). Crowdfunding campaigners can improve their legitimacy signals and credibility perceptions through design choices that benefit from eye-tracking feedback optimization (Srivastava & Bag, 2024).

As a cognitive tool, eye-tracking provides detailed insights into attention distribution within crowdfunding campaigns. The empirical evidence provided by this method demonstrates how and where attention is distributed which aligns with the Attention-Based View. By combining eye-tracking with other neurophysiological approaches we gain a deeper comprehension of the journey from visual involvement to cognitive processing which leads to decision-making in collective fundraising scenarios.

Demographic Factors as Moderators in Crowdfunding

According to the literature there is strong evidence for the moderating role of gender as a demographic feature. Research shows that male and female investors present different patterns of risk taking, trust, and decision-making. In an equity crowdfunding context, female investors are more conservative and less likely to invest in high-tech or early-stage ventures (Mohammadi & Shafi, 2018). From a sociopsychological point of view, gender stereotypes can also affect the evaluation and analyzing the signals. The signal of “ambition” may be interpreted positively for a male entrepreneur but negatively for a female peer (Kleinert & Mochkabadi, 2022). Recent work by Serwaah et al. (2024) present more details on how different psychological backgrounds influence participation intentions in different genders (Serwaah et al., 2024). This study suggests that men and women may systematically prioritize different signal, for example, one gender find creator trustworthiness signals more important, while the other gender may value more on population-oriented signals.

Similarly, a backer’s age can shape their cognitive and behavioral approach to crowdfunding campaigns. Age moderates entrepreneurs’ decisions to adopt crowdfunding, suggesting that age affect their perceptions of the risks and benefits of the platform (Laaouina et al., 2024). Considering this approach more experienced older backers may be more analytical and like quality signals such as the founder’s human capital, relying less on exploratory cues such as herding behavior and more on deep quality signals. On the other hand, younger backers may be more affected by crowd-generated signals including social proof and real-time signals.

Integrating Signaling Theory and Eye-Tracking in Crowdfunding

Crowd signals come from the decisions and actions of other backers and provide a social proof that helps reducing the investors uncertainty.

The main mechanism here is herd behavior, where backers follow the actions of others, thinking that early contributors have superior information (Rodríguez-Garnica et al., 2024). This can lead to information cascades, where funding contribution is self-perpetuating (Vismara, 2018). Cumulative funding totals and number of backers are the most observable crowd signals, and strong early performance on these measures is a strong predictor of final success (Burtch et al., 2013). This process is speeding up by the creator's social network, whose initial support acts as a reliable signal to the public (Agrawal et al., 2015).

The recent literature has begun to analyze the impact of negative signals. For example, comments or questions from the crowd can indicate potential problems with the project or a lack of creator transparency. The presence of such negative signals can discourage potential backers, often outweighing the positive impact of other signals (Chen et al., 2022). Furthermore, the composition of the crowd is also important. The presence of identifiable expert investors or core backers with high social capital lend credibility to a project that affect numerous beginner backers' decision making (Kim & Viswanathan, 2019).

A fundamental development in signaling research is the recognition that signals are not interpreted in a vacuum. The effectiveness of a signal depends strongly on the characteristics of the receiver. Human capital of funders themselves determines which signals they pay attention to on a campaign page (Butticè et al., 2022). This finding breaks the implicit assumption of a homogeneous population and necessitates a framework that consider supporter heterogeneity. This paper shows that gender and age are two demographic characteristics that adjust the signal interpretation process.

Conceptual Framework

This study leverages a mixed-methods approach to examine how creator and crowd signals influence backer funding decisions in crowdfunding. The central theory of the conceptual model is based on Signaling Theory (Connelly et al., 2011, 2025; Spence, 1978), which posits that in conditions of information asymmetry, signals are used to convey unobservable quality from one party (the creator) to another (the backer). Our framework integrates this theory with an experimental design that manipulates signal strength by using eye-tracking technology to observe cognitive processes. In this section we scrutinize each part of the framework while proposing theoretical relationships between them.

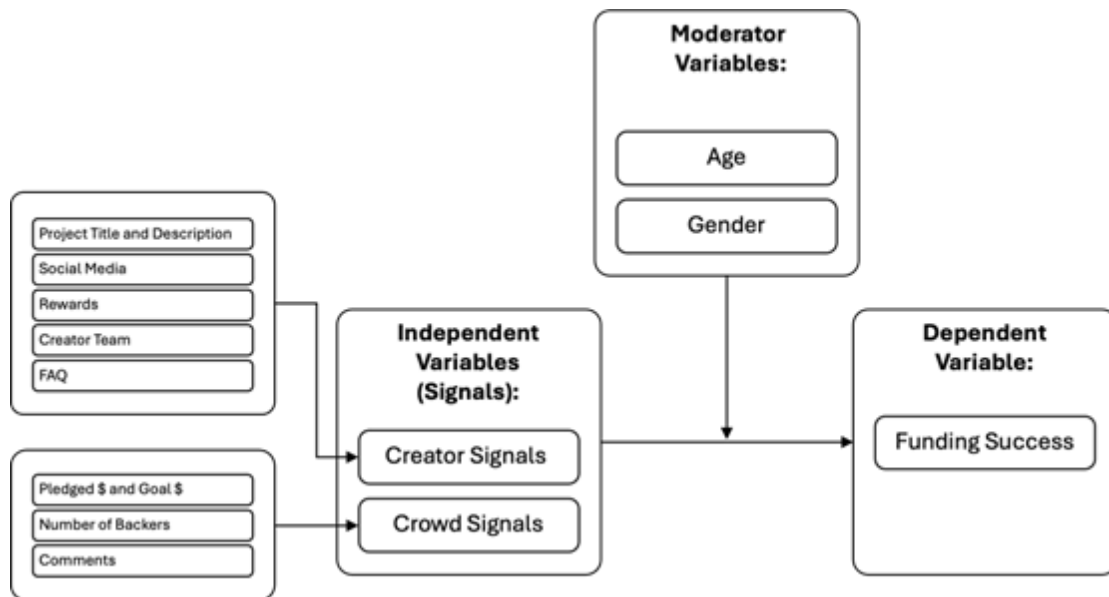
In crowdfunding, signaling theory underscores the importance of observable signals that reliably convey a project's quality and credibility to potential backers (Acar et al., 2021; Belleflamme et al., 2014). Creators use signals like campaign presentations, project updates, and social media engagement to demonstrate competence, commitment, and preparedness, assuring backers of their ability to deliver. Meanwhile, crowd signals, such as the number of backers, total pledge amounts, and active comment sections, provide external validation and momentum, indicating widespread trust and enthusiasm for the project. Together, these signals help bridge the information gap between creators and backers, fostering trust and increasing the likelihood of funding success.

These signals reduce uncertainty by providing informational shortcuts that shape backer judgments. Cognitive biases amplify their influence: anchoring strengthens the weight of early creator cues (Herzenstein et al., 2011; Kuppaswamy & Bayus, 2017; Lin et al., 2013), while the bandwagon effect heightens the pull of visible crowd momentum (Kuppaswamy & Bayus, 2017).

The conceptual model explores two primary signals, manipulated at different levels of strength, to investigate their influence on backer decision-making. The creator signal strength (Anchoring) is aligned with signaling theory, this variable represents the effort and quality invested by the campaign creator. A High creator signal is demonstrated through high-quality components such as a polished project title, a detailed description, a strong social media presence, and a well-defined creator team. A Low creator signal uses poor-quality counterparts of these same elements. The theoretical link here is with anchoring bias, where the initial impression formed from these creator signals can disproportionately influence a backer's subsequent judgments (Herzenstein et al., 2011; Kuppaswamy & Bayus, 2017; Lin et al., 2013). We expect that participants will anchor their decisions on the quality of these initial signals, and eye-tracking will reveal longer dwell times and more frequent fixations on these high-quality creator signals in the high-signal condition.

The crowd signal strength (Bandwagon) represents the social proof and early momentum of the campaign. A High crowd signal is conveyed through a large pledged amount, a high number of backers, and numerous positive comments. A Low crowd signal presents the opposite. This aligns with the bandwagon effect, where individuals are more likely to follow the perceived behavior of a group (Kuppuswamy & Bayus, 2017). According to signaling theory, these crowd signals serve as a proxy for project quality, and we anticipate they will reduce perceived risk. Eye-tracking data will be used to analyze whether participants in the high-crowd-signal condition spend more time fixating on these crowd metrics, indicating that social proof cues are a key component of their decision-making process.

Figure 1: Conceptual framework: Crowdfunding Signal Response Model (CSRM)



Integration of Eye Tracking with Signaling Theory

While signaling theory traditionally focuses on the content and interpretation of signals, the CSRM extends it by incorporating physiological attention metrics as a measurable bridge between signal presentation and decision outcome. Eye-tracking data provides evidence of signal salience (what draws attention) and signal processing (how long attention is held), allowing if greater visual engagement with specific signals leads to higher contribution levels. By embedding attention data directly into the conceptual model, this framework moves beyond self-reported perceptions and links signal design, signal perception, and behavioral outcomes in a single, testable system.

Research Propositions

In crowdfunding, creator signals act as the first direct channel through which potential backers form impressions of a project's trustworthiness and feasibility. Signaling theory emphasizes that high-quality signals, such as a polished project description, professional visuals, a detailed FAQ, and evidence of prior experience, serve as credible indicators of the creator's capability and commitment (Connelly et al., 2011; Huang et al., 2022). From a cognitive standpoint, the anchoring bias further magnifies their influence, as early exposure to strong creator cues can shape subsequent judgments. Eye-tracking research suggests that elements perceived as credible receive more sustained visual attention, which in turn predicts a higher likelihood of investment (Butticè et al., 2022). Therefore, when creator signals are strong, participants are more likely to dwell longer on investment cues (e.g., the "Back" button).

Proposition 1: Stronger creator signals will be associated with higher perceived campaign credibility and, consequently, greater intention to invest

Crowd signals, such as a high pledged amount, a large number of backers, and an active comment section, operate as powerful forms of social proof in the crowdfunding context (Agrawal et al., 2015; Courtney et al., 2017). According to signaling theory, these metrics function as receiver-driven quality cues, in which the backer infers

quality not from the creator's direct self-presentation but from the observed behavior of other participants (Acar et al., 2021). The bandwagon effect explains how visible popularity triggers conformity tendencies, leading individuals to align their behavior with perceived group norms. High crowd signals, especially in early campaign stages, can reduce the perceived risk of investment by suggesting that others have already vetted and endorsed the project (Bitterl & Schreier, 2018). This perceived legitimacy often draws more visual attention to the investment opportunity, increasing both the likelihood of gaze fixation on the "Back" button and the probability of clicking it.

Proposition 2: Stronger crowd signals will be associated with higher perceived campaign popularity and, consequently, greater intention to invest.

Signaling theory assumes that receivers interpret signals based on their own cognitive frameworks, which can vary across demographic groups (Serwaah et al., 2024). Prior research indicates that age can influence risk perception, information processing speed, and susceptibility to social influence, while gender differences may affect trust formation and response to competitive versus communal cues (Bapna & Ganco, 2021; Laaouina et al., 2024). For instance, younger backers may respond more strongly to high crowd signals due to greater social tendencies, whereas older backers may prioritize creator credibility signals. Eye-tracking can reveal these differences by comparing gaze patterns across demographic groups. Thus, the moderating role of demographics recognizes that the impact of creator and crowd signals is not uniform, but instead shaped by the characteristics of the backer.

Proposition 3: Demographic factors such as age and gender will moderate the way creator and crowd signals are attended to and interpreted.

Discussion

This paper proposed the Crowdfunding Signal Response Model (CSRM), a conceptual framework designed to explain how backers make funding decisions in the complex, information-rich environment of crowdfunding. The proposed framework offers a more nuanced understanding of the interplay between campaign signals, cognitive processing, and investment outcomes. The model propose that the strength of creator and crowd signals directly influences a backer's intention to invest, and this relationship is mediated by the visual attention paid to those signals and moderated by demographic factors.

Theoretical Implications

The CSRM offers several significant contributions to marketing and management theory. First and foremost, it extends signaling theory by operationalizing a previously implicit mechanism about the cognitive processing of the signal itself. It posits that a signal's effectiveness is not merely a function of its content, but also of its ability to capture and hold attention. This moves the theory beyond a purely informational perspective to one that acknowledges the neurocognitive factors of decision-making.

Besides, the framework serves as a bridge between two streams of research: the wisdom of crowds and cognitive bias. The literature on crowd wisdom generally takes an optimistic view, suggesting that collective intelligence can lead to superior outcomes (Surowiecki, 2005). Conversely, research on biases highlights the systematic errors in human judgment that can lead to irrational decisions (Tversky & Kahneman, 1974). The CSRM considers these perspectives by proposing that the quality of crowd wisdom is contingent on the cognitive environment. When creator and crowd signals are strong and transparent, they can facilitate rational, collective assessment. However, when these same signaling mechanisms are manipulated or misinterpreted, they can trigger cognitive biases like anchoring (from strong initial creator signals) and bandwagon effect (from powerful crowd signals), thereby undermining the wisdom of the crowd. This integration provides a more realistic model of collective decision-making in digital environments, where both rational analysis and cognitive coexist.

Practical Implications

The CSRM provides a clear, actionable guideline for entrepreneurs and innovators looking to launch crowdfunding campaigns. The framework demonstrates that success is not a matter of chance but a result of strategic signal management. Entrepreneurs can directly influence backer perceptions by monitoring both the signals they send and the signals the crowd generates. This includes investing in writing a detailed and compelling project description, and creating professional graphics. A well-researched and comprehensive FAQ section signals foresight, while the "About the Team" section with clear biographies and social media links builds trust and credibility. The structure of the rewards is also a critical signal; offering well-defined, attractive, and realistically rewards signals that the creator has a viable plan for fulfillment.

Simultaneously, creators must manage crowd signals to build momentum and social proof. The first days of a campaign are critical for establishing a strong bandwagon effect. This initial performance signals to subsequent, unaffiliated backers that the project has been vetted and is likely to succeed. Furthermore, actively managing the comments section by responding quickly and thoroughly to questions fosters a sense of community and transparency. Highlighting positive backer comments or media mentions in campaign updates can further amplify these positive crowd signals, reinforcing the perception of a popular and trustworthy project. By systematically strengthening these signals, creators can build an environment that encourages more contributions.

Policy Implications

Beyond individual campaign strategy, the CSRM can assist designers and regulators of crowdfunding platforms like Kickstarter, Indiegogo, and GoFundMe. These platforms are not neutral marketplaces; their user interface design, algorithms, and policies shape the decision-making environment and can either mitigate or exacerbate cognitive biases. The framework suggests that platform designers have a responsibility to foster an ecosystem that promotes informed and rational choices.

For instance, platforms could reconsider how they display funding progress. While a rapidly rising funding meter can generate excitement, it can also trigger bandwagon behavior, leading backers to support a project based on its popularity rather than its intrinsic merit. Platforms could experiment with alternative displays, such as showing the number of backers relative to the funding goal or providing more context about the funding velocity.

Future Research and Limitations

The propositions initiate from the framework, while based in established theory, require rigorous thorough and strict testing to confirm their real-world applicability. Future research should therefore focus on empirically examining the relationships presented in the model. This study indicates several promising areas for investigation and invites a multi-methodological approach.

Future studies should explore the dynamic interplay between different signal types. This leads to critical research questions, including, to what extent does the bandwagon effect from strong crowd signals make up, or even outweigh, weak creator signals? In contrast, can strong creator signals, for example a founder with a proven track record overcomes a lack of initial crowd momentum? Understanding these trade-offs is essential for both theory and practice. Besides, the moderating role of demographics needs further exploration. In other words, analyzing that whether older backers, who may be more conservative, allocate more visual attention to creator signals related to credibility including team bios or risk sections, compared to younger backers, who may be more influenced by social proof and crowd signals.

Answering these questions, researchers could apply different methods. Controlled laboratory experiments using eye-tracking technology would be ideal for testing the main model's logic. Researchers create simulated crowdfunding pages, manipulating the strength of creator and crowd signals in a factorial design and measuring both visual attention and behavioral outcomes. Another effective method is the analysis of secondary data from important crowdfunding platforms. By analyzing large-scale datasets, researchers could use econometric models to analyze the relationships between visual campaign features and funding success, controlling for a variety of project characteristics. Finally, field studies and surveys of real-world crowdfunding backers could provide rich qualitative insights and test the model's propositions in a field setting, enriching the results from more controlled methods.

Conclusion

This paper provides a concept for decision-making in crowdfunding campaign by introducing the Crowdfunding Signal Response Model (CSRM), an integrated framework that links signaling theory with neurocognitive measures of attention. By distinguishing the effect of creator signals and crowd signals and its effects on visual attention, the model offers a more detailed explanation of how potential backers process and respond to information in an environment marked by significant information asymmetry. Moreover, considering demographic moderators such as age and gender, the CSRM is not limited to the assumption of a homogeneous audience, and recognize the backer heterogeneity as a key factor of signal interpretation and effectiveness.

This study provides a knowledge contribution by combining signaling theory and observable cognitive processing, by applying eye-tracking metrics. This approach makes a bridge between the optimistic view of crowd wisdom and the cautionary perspective on cognitive biases and explain that the quality and transparency of signals

and can cause the cognitive biased such as anchoring and the bandwagon effect. As a result, the CSRSM locates crowdfunding at the intersection of marketing communication, behavioral economics, and consumer neuroscience. Practically speaking, the model provides entrepreneurs with a roadmap for structuring campaigns to increase perceived credibility and popularity.

Although this is a conceptual study, it provides a framework for empirical testing. Future research should gather experimental and large-scale data approaches to proof the model's propositions, investigate potential balancing between creator and crowd signals, and more demographic characteristics that affect backers' attention. This study not only improve the theoretical boundaries of the CSRSM but also provide practical insights for optimizing crowdfunding outcomes. Finally, by linking the design of crowdfunding signals to measurable cognitive engagement, the CSRSM offers a conceptual model for campaigns and platforms that are both more effective and more transparent, promoting trust and efficiency in digital entrepreneurial finance.

References

- Acar, O. A., Dahl, D. W., Fuchs, C., & Schreier, M. (2021). The signal value of crowdfunded products. *Journal of Marketing Research*, 58(4), 644–661.
- Agrawal, A., Catalini, C., & Goldfarb, A. (2015). Crowdfunding: Geography, social networks, and the timing of investment decisions. *Journal of Economics & Management Strategy*, 24(2), 253–274.
- Ahlers, G. K. C., Cumming, D., Günther, C., & Schweizer, D. (2015). Signaling in equity crowdfunding. *Entrepreneurship Theory and Practice*, 39(4), 955–980.
- Alsharif, A. H., Md Salleh, N. Z., Baharun, R., & Rami Hashem E, A. (2021). Neuromarketing research in the last five years: A bibliometric analysis. *Cogent Business & Management*, 8(1), 1978620.
- Alsharif, A. H., Salleh, N. Z. M., Abdullah, M., Khraiwish, A., & Ashaari, A. (2023). Neuromarketing tools used in the marketing mix: A systematic literature and future research agenda. *Sage Open*, 13(1), 21582440231156564.
- Bapna, S., & Ganco, M. (2021). Gender gaps in equity crowdfunding: Evidence from a randomized field experiment. *Management Science*, 67(5), 2679–2710.
- Belleflamme, P., Lambert, T., & Schwienbacher, A. (2014). Crowdfunding: Tapping the right crowd. *Journal of Business Venturing*, 29(5), 585–609.
- Bitterl, S., & Schreier, M. (2018). When consumers become project backers: The psychological consequences of participation in crowdfunding. *International Journal of Research in Marketing*, 35(4), 673–685.
- Burtch, G., Ghose, A., & Wattal, S. (2013). An empirical examination of the antecedents and consequences of contribution patterns in crowd-funded markets. *Information Systems Research*, 24(3), 499–519.
- Butticè, V., Collewaert, V., Stroe, S., Vanacker, T., Vismara, S., & Walthoff-Borm, X. (2022). Equity crowdfunders' human capital and signal set formation: Evidence from eye tracking. *Entrepreneurship Theory and Practice*, 46(5), 1317–1343.
- Chen, T., Samaranayake, P., Cen, X. Y., Qi, M., & Lan, Y. C. (2022). The Impact of Online Reviews on Consumers' Purchasing Decisions: Evidence From an Eye-Tracking Study. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.865702>
- Colombo, M. G., Franzoni, C., & Rossi-Lamastra, C. (2015). Internal social capital and the attraction of early contributions in crowdfunding. *Entrepreneurship Theory and Practice*, 39(1), 75–100.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39–67.

- Connelly, B. L., Certo, S. T., Reutzel, C. R., DesJardine, M. R., & Zhou, Y. S. (2025). Signaling theory: state of the theory and its future. *Journal of Management*, 51(1), 24–61.
- Courtney, C., Dutta, S., & Li, Y. (2017). Resolving information asymmetry: Signaling, endorsement, and crowdfunding success. *Entrepreneurship Theory and Practice*, 41(2), 265–290.
- Davis-Stober, C. P., Budescu, D. V., Dana, J., & Broomell, S. B. (2014). When is a crowd wise? *Decision*, 1(2), 79.
- Harris, J. M., Ciorciari, J., & Gountas, J. (2018). Consumer neuroscience for marketing researchers. *Journal of Consumer Behaviour*, 17(3), 239–252.
- Herzenstein, M., Sonenshein, S., & Dholakia, U. M. (2011). Tell me a good story and I may lend you money: The role of narratives in peer-to-peer lending decisions. *Journal of Marketing Research*, 48(SPL), S138–S149.
- Hong, H., Ye, Q., Du, Q., Wang, G. A., & Fan, W. (2020). Crowd characteristics and crowd wisdom: Evidence from an online investment community. *Journal of the Association for Information Science and Technology*, 71(4), 423–435.
- Hornuf, L., & Schwienbacher, A. (2018). Market mechanisms and funding dynamics in equity crowdfunding. *Journal of Corporate Finance*, 50, 556–574.
- Huang, S., Pickernell, D., Battisti, M., & Nguyen, T. (2022). Signalling entrepreneurs' credibility and project quality for crowdfunding success: cases from the Kickstarter and Indiegogo environments. *Small Business Economics*, 58(4), 1801–1821.
- Jo, K. M., & Yang, S. (2021). Is there crowd wisdom in accounting? Evidence from forecasts in equity-based crowdfunding. *Journal of Accounting, Auditing & Finance*, 36(4), 723–749.
- Kaminski, J. C., & Hopp, C. (2020). Predicting outcomes in crowdfunding campaigns with textual, visual, and linguistic signals. *Small Business Economics*, 55(3), 627–649.
- Khushaba, R. N., Wise, C., Kodagoda, S., Louviere, J., Kahn, B. E., & Townsend, C. (2013). Consumer neuroscience: Assessing the brain response to marketing stimuli using electroencephalogram (EEG) and eye tracking. *Expert Systems with Applications*, 40(9), 3803–3812.
- Kim, K., & Viswanathan, S. (2019). The experts in the crowd: the role of experienced investors in a crowdfunding market. *MIS Q* 43 (2): 347–372.
- Kleinert, S., & Mochkabadi, K. (2022). Gender stereotypes in equity crowdfunding: the effect of gender bias on the interpretation of quality signals. *The Journal of Technology Transfer*, 47(6), 1640–1661.
- Kuppuswamy, V., & Bayus, B. L. (2017). Does my contribution to your crowdfunding project matter? *Journal of Business Venturing*, 32(1), 72–89.
- Laaouina, S., El Aoufi, S., & Benali, M. (2024). How Does Age Moderate the Determinants of Crowdfunding Adoption by SMEs's: Evidences from Morocco? *Journal of Risk and Financial Management*, 17(1), 18.
- Lagazio, C., & Querci, F. (2018). Exploring the multi-sided nature of crowdfunding campaign success. *Journal of Business Research*, 90, 318–324.
- Lin, M., Prabhala, N. R., & Viswanathan, S. (2013). Judging borrowers by the company they keep: Friendship networks and information asymmetry in online peer-to-peer lending. *Management Science*, 59(1), 17–35.
- Lorenz, J., Rauhut, H., Schweitzer, F., & Helbing, D. (2011). How social influence can undermine the wisdom of crowd effect. *Proceedings of the National Academy of Sciences*, 108(22), 9020–9025.
- Malhotra, N. K. (2004). Review of marketing research. ME Sharpe.

- Mohammadi, A., & Shafi, K. (2018). Gender differences in the contribution patterns of equity-crowdfunding investors. *Small Business Economics*, 50(2), 275–287. <https://doi.org/10.1007/s11187-016-9825-7>
- Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29(1), 1–16.
- Polzin, F., Toxopeus, H., & Stam, E. (2018). The wisdom of the crowd in funding: information heterogeneity and social networks of crowdfunders. *Small Business Economics*, 50, 251–273.
- Rodríguez-Garnica, G., Gutiérrez-Urtiaga, M., & Tribo, J. A. (2024). Signaling and herding in reward-based crowdfunding. *Small Business Economics*, 1–28.
- Scheaf, D. J., Davis, B. C., Webb, J. W., Coombs, J. E., Borns, J., & Holloway, G. (2018). Signals' flexibility and interaction with visual cues: Insights from crowdfunding. *Journal of Business Venturing*, 33(6), 720–741.
- Serwaah, P., Shneor, R., Nyarko, S. A., & Nielsen, K. R. (2024). Explaining gender differences in crowdfunding contribution intentions. *Technology in Society*, 76, 102425.
- Spence, M. (1978). Job market signaling. In *Uncertainty in economics* (pp. 281–306). Elsevier.
- Srivastava, G., & Bag, S. (2024). Modern-day marketing concepts based on face recognition and neuro-marketing: a review and future research directions. *Benchmarking: An International Journal*, 31(2), 410–438.
- Stasi, A., Songa, G., Mauri, M., Ciceri, A., Diotallevi, F., Nardone, G., & Russo, V. (2018). Neuromarketing empirical approaches and food choice: A systematic review. *Food Research International*, 108, 650–664.
- Steigenberger, N., & Wilhelm, H. (2018). Extending signaling theory to rhetorical signals: Evidence from crowdfunding. *Organization Science*, 29(3), 529–546.
- Surowiecki, J. (2005). *The wisdom of crowds*. Vintage.
- Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases: Biases in judgments reveal some heuristics of thinking under uncertainty. *Science*, 185(4157), 1124–1131.
- Vismara, S. (2018). Information cascades among investors in equity crowdfunding. *Entrepreneurship Theory and Practice*, 42(3), 467–497.
- Wang, N., Li, Q., Liang, H., Ye, T., & Ge, S. (2018). Understanding the importance of interaction between creators and backers in crowdfunding success. *Electronic Commerce Research and Applications*, 27, 106–117.
- Weststrate, N. M., Bluck, S., & Glück, J. (2019). Wisdom of the Crowd. *The Cambridge Handbook of Wisdom*, 97–121.

Summary Brief

‘How Do You Say It?’: Decoding the Influence of Gendered Messaging on Women’s Engagement with Financial Services Communication

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The BFSI sector, represented by Banking, Financial Services and Insurance, is increasingly becoming central to a country’s economy. Enveloped in neoliberal ideologies, India is witnessing a rise in women’s financial independence with greater participation in paid work, however advertising and marketing efforts in the BFSI sector continue to be gendered, privileging men over women. In our study, we deploy a mixed methods approach using in-depth interviews with working women in urban India and Natural Language Processing (NLP) techniques to look for metaphors and meaning making in financial advertising in India. We lens our study through Gendered Language Theory scholarship, in a growing neoliberal India in the context of BFSI sector. Through this, we attempt to establish how language contributes to the reproduction of gendered power equations, thereby shaping the engagement with the sector through gatekeeping of who is deserving of participation, in wealth creation and of financial well-being.

Context & Rationale

Gender inclusion and equality have been hot topics of discussion across organizations, and well aligned with the global priorities for sustainable development (United Nations, 2023). While efforts around empowerment and equality are underway, there continues to be ongoing challenges and disparities around financial literacy, lower wages and breaks in employment impacting women’s financial wellbeing (Gonçalves et al., 2021). Such disparity is starkly visible in the way the BFSI sector crafts its communication campaigns, treating men as the primary audience and women as passive beneficiaries with limited or no agency (Giannella et al., 2025), which has become more pronounced given the democratization of digital tools for customer targeting. The recent interest and rise in ‘femvertising’ with usage of metaphors and language leads to the propagation of false empowerment narratives, which are often driven by corporate agendas than real change and inclusivity (Varghese & Kumar, 2020). For instance, Insurance companies have been noted to be using strategies to “financialise domestic labour” to build a narrative of empowerment, without really addressing challenges and systemic issues with gendered distribution of such unpaid labour at home, which disadvantage women (Kar, 2023). Literature points towards how women invest much lesser than men, and therefore are less likely to accumulate as much wealth as their male counterparts (Giannella et al., 2025), much of which in the Indian context, can be attributed to lopsided gendered practices around distribution of domestic and care work responsibilities (Time Use Survey, 2024) leaving them with far lesser time to engage in income generating activities when compared with men. Giannella et al (2025), observed how language and the use of metaphors such as “Beat the market”, “Build your portfolio”, “Dominate the market” can be perceived to be masculine in its discourse, leading to disengagement from women as a consumer segment, thereby bringing attention to the role of language in marketing and communication.

Interestingly, an analysis of advertisements in The Economist magazine between 1949 to 2023 revealed that more than 80% of the main protagonist of the ads centred around men, which was in stark contrast to women representations around financial expertise (Langer & Niessen-Ruenzi, 2024). Furthermore, “Femvertising” rose as a response to dislodge gender stereotypes however, soon found itself entrapped in issues surrounding authenticity and “corporate profiteering” leading to “femwashing” which privileges profiteering agendas under the narrative of feminism, which were further highlighted with the advent of social media, questioning companies of the authenticity of such communication (Varghese & Kumar, 2020; Kordrostami & Lacznia, 2021; Hainneville et al., 2022). Thus, while existing literature well captures the persistence of gendered financial discourses and the rise in femvertising as an attempt to counter such imbalances, there is the need to understand how language usage and communication strategies by BFSI brands with the popularization of digital marketing, are understood and interpreted by women consumers and how the same shapes their attitude, the sense of empowerment while engaging with the BFSI sector given the rise in neoliberalism where individuals are responsible for their own success and failures.

Theoretical Underpinning

Our research proposes to apply Gendered Language Theory to describe how gender norms as visible through advertising practices can contribute to explaining women's engagement or lack of it with the financial services ecosystem, providing a conceptual bridge between financial agency and advertising practices influencing women's desire and motivation to participate with the BFSI sector.

Methods

We propose a mixed methods approach through qualitative semi-structured in-depth interviews with working women in urban India, to decode the meanings around "empowerment" and "financial independence" in today's neoliberal context, examine the role of BFSI campaigns and its influence on their engagement with the category. Secondly, we aim to study, the linguistic patterns in BFSI communication to understand the extent of marginalization or neglect of women" in such communication through the use of NLP techniques. Given the extensive use of digital media as a marketing vehicle, our focus would be on digital advertising campaigns. s

Proposed Implications

Through our study, we attempt to contribute towards understanding how marketing campaigns systematically neglect women as a consumer group which are not just critical to market but important to cater to, well in alignment with principles of gender equality. In doing so, we aim to contribute to scholarship around Gendered Language Theory given the rising context of neoliberalism, additionally we aim to create pathways for advertising and marketing in the BFSI sector to be more inclusive transcending beyond tokenistic messaging around equality.

References

- Giannella, V. A., Manzi, C., Crapolicchio, E., & Prast, H. (2025). "Beat the market!" or "Take care of your savings": Can Language in Bank Advertisements Influence Women's Attitudes Towards Finance? An Experimental Comparison of Different - Inclusive - Languages to Counter the Gender Gap in Finance. *Journal of Behavioral and Experimental Economics*, 102399. <https://doi.org/10.1016/j.socec.2025.102399>
- Gonçalves, V. N., Ponchio, M. C., & Basílio, R. G. (2021). Women's financial well-being: A systematic literature review and directions for future research. *International Journal of Consumer Studies*, 45(4), 824–843. <https://doi.org/10.1111/ijcs.12673>
- Government of India, Ministry of Statistics & Programme Implementation. (2025). Time Use in India 2024: Time Use Survey Report (January–December 2024). Press Information Bureau, Government of India.
- Hainneville, V., Guèvremont, A., & Robinot, É. (2022). Femvertising or femwashing? Women's perceptions of authenticity. *Journal of Consumer Behaviour*, 22(4), 933–941. <https://doi.org/10.1002/cb.2020>
- Kar, S. (2023). Domestic values: gendered labor and the uncanniness of critique in marketing life insurance for women. *Journal of Cultural Economy*, 17(3), 314–330. <https://doi.org/10.1080/17530350.2023.2278480>
- Kordrostami, M., & Lacznik, R. N. (2021). Female power portrayals in advertising. *International Journal of Advertising*, 41(7), 1181–1208. <https://doi.org/10.1080/02650487.2021.1998878>
- Langer, L., & Niessen-Ruenzi, A. (2024). Gender stereotypes in financial advertisements. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4752630>
- UN Women & United Nations Department of Economic and Social Affairs. (2023). Progress on the Sustainable Development Goals: The Gender Snapshot 2023. United Nations. <https://www.unwomen.org/en/digital-library/publications/2023/09/progress-on-the-sustainable-development-goals-the-gender-snapshot-2023>
- Varghese, N., & Kumar, N. (2020). Feminism in advertising: Irony or revolution? A critical review of femvertising. *Feminist Media Studies*, 22(2), 441–459. <https://doi.org/10.1080/14680777.2020.1825510>

Summary Brief

The Impact of Cross-Retailer Local Inventory Visibility on Channel Choice

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Keywords: omnichannel; SOPIS; local inventory visibility; search costs; perceived efficiency; immediacy, trust, channel choice

Introduction

Technological advances increasingly blur the line between online search and offline purchase in omnichannel retailing. This study examines SOPIS (search online, purchase in-store), enabled by cross-retailer, real-time local inventory visibility in search results and maps. SOPIS is conceptually distinct from BOPIS (buy online, pick up in store): under BOPIS, a shopper chooses a single retailer, completes the transaction online, and reserves inventory for pickup at that retailer's location. The decision occurs within a closed, single-retailer ecosystem, and the stock is typically allocated to the order, reducing stock-out risk while enhancing retailer-specific loyalty. By contrast, SOPIS exposes store-level product availability across multiple nearby retailers at the search stage, before any retailer is chosen and without placing an online order. This disclosure lowers search costs and stock-out uncertainty while leaving inventory unreserved and competition open across outlets, consistent with the broader evolution from multi- to omni-channel retailing (Verhoef, Kannan, & Inman, 2015). Real-world implementations include Google's Local Inventory formats that display "In stock nearby" badges for queries such as "AA batteries near me" or "girls pink leotards," often listing Best Buy, GameStop, Target, and local retailers side-by-side. Similarly, NearSt, an in-store inventory platform used by independent retailers, presents live in-store inventory in Google Search and Maps (NearSt, n.d.), creating opportunities to convert online shoppers into in-store customers.

Using an experimental design, this study aims to examine: (1) the main effect of SOPIS-style inventory cues on channel choice (visit a store today vs. buy online vs. not buy) and; (2) more importantly, to identify boundary conditions such as urgency, distance, delivery promises, and stock-certainty, under which SOPIS shifts decisions toward in-store purchase. Theoretically, we distinguish SOPIS from BOPIS and propose empirically testable hypotheses for the effectiveness of search-stage inventory visibility on channel choices via reduced search cost, greater perceived efficiency, higher immediacy value, and trust in product availability information. Practically, we deliver actionable guidance, especially for small/local retailers, on when and how to present local stock cues in search results to compete against online pure-plays (e.g., by monetizing proximity and "get-it-today" value).

Background

Prior BOPIS research shows that the presence (vs. absence) of inventory information changes the economics of search and fulfillment. For example, Gallino and Moreno (2014) show that implementing buy-online-pick-up-in-store (BOPS) reduces online sales but increases store traffic and store sales, confirming that consumers switch to offline purchases when in-store merchandise availability becomes credible. Similarly, Gao and Su (2017) model BOPS as providing real-time in-store product availability and lowering hassle costs, which alters the online-versus-store trade-off and yields boundary conditions under which transparency diverts or expands demand. In addition, research on inventory record inaccuracy provides empirical evidence that quality of inventory information changes effective availability and thus the consumer's search and fulfillment experience (Campo et al., 2000; DeHoratius & Raman, 2008).

Although the implementation of SOPIS tools is spreading, few empirical studies directly link search-stage, cross-retailer inventory visibility to channel-choice decisions. Grewal et al. (2023) proposed a framework in which in-store technology (including real-time inventory visibility) can enhance customer experience and efficiency; they also call for empirical evidence on these effects. However, recent work has concentrated on adjacent topics such as shoptainment and experience design (Breugelmans et al., 2023), consumer-facing technologies in stores (Berg, Nilsson, & Liljedal, 2024), and frontline retail technology more broadly (Rese & Witthohn, 2025; Schultz, 2025). As SOPIS technologies create an evolving market-level, cross-retailer choice environment, the relationship between inventory visibility and channel choice and its boundary conditions decisions remains under-studied.

Theoretical Framework

We conceptualize SOPIS visibility as an information cue and availability affordance that appears at the search stage, before a retailer is chosen. Showing real-time local stock (e.g., “In stock nearby”) changes the choice environment by reducing perceived search cost/effort (less calling or driving to verify), increasing perceived immediacy value (certainty of getting the item today), strengthening trust in availability, and raising perceived efficiency (a sense that the journey will take less time/effort overall). These mechanism shifts increase the relative attractiveness of visiting a nearby store now versus completing the transaction online. The impact of visibility is conditional on task and context: when urgency is high, distance is short, delivery is slower (not same-day), and stock certainty is high (recently verified), the benefit of visiting today increases. Overall, we expect SOPIS visibility to increase the likelihood of choosing an in-store purchase today rather than buying online, with stronger effects under the conditions above.

Hypotheses Development

Main Effect:

H1 (Visibility → Offline Choice): Displaying a local “In stock nearby” cue (vs. when the inventory information is absent) increases the likelihood for a customer to choose visiting the store and purchase today.

Boundary Conditions (Interactions)

H1a (Interaction: Urgency X Visibility): The H1 effect is greater under high urgency than under low urgency.

H1b (Distance X Visibility): The H1 effect is greater when distance to the local store is short than when distance is long.

H1c (Delivery Speed X Visibility): The H1 effect is greater when delivery is slower (e.g., 2–3 days) than when delivery is faster (e.g., same-day/tomorrow).

H1d (Stock Certainty X Visibility): The H1 effect is greater when stock certainty is high (recent verification) than when it is low (stale update).

Underlying Mechanism (Mediation)

H2a (Search Cost): The effect of visibility on choosing the store is mediated by lower perceived search cost.

H2b (Immediacy): The effect of visibility on choosing the store is mediated by higher perceived immediacy value.

H2c (Efficiency): The effect of visibility on choosing the store is mediated by higher perceived efficiency.

H2d (Trust): The effect of visibility on choosing the store is mediated by higher trust in availability information.

Methodology

We will recruit participants from a reputable consumer panel (e.g., Prolific) and present screenshot-style search results. Specifically, the inventory-visibility treatment displays a standardized “In stock nearby” badge with distance and hours; the control condition suppresses local stock cues. Orthogonal manipulations vary urgency (need today versus this week), distance (about 5–10 versus 25–30 minutes), delivery promise (today versus tomorrow versus two to three days), and stock certainty (confirmed 15 minutes ago versus updated yesterday). A multi-study approach will be implemented, using different product types to enhance generalizability of the findings. Across product types, participants will be randomly assigned to a condition and choose among “visit the local store and buy today”, “buy online for delivery”, or “not buy”, allowing us to test the main and interaction effects (e.g., visibility → channel choice, visibility × urgency, visibility × distance, visibility delivery speed, visibility × stock certainty).

Mediation tests will be used to assess whether perceived search-cost reduction, immediacy value, perceived efficiency, and trust in availability explain the effects of visibility on channel choice.

Expected Results and Anticipated Contributions

We expect inventory visibility to increase the likelihood of choosing offline, particularly for high-urgency tasks, when the store is at a short distance, when delivery is not same-day, and when inventory certainty is high.

To theory, the study provides empirical evidence that at search-stage, cross-retailer inventory visibility shifts channel choice by lowering search costs, increasing immediacy value, perceived efficiency and trust in product availability information. For practitioners, we offer normative principles for when and how to present local stock information in search.

References

- Berg, H., Nilsson, E., & Liljedal, K. T. (2024). Consumer-facing technology in retailing: How technology shapes customer experience in physical and digital stores. *The International Review of Retail, Distribution and Consumer Research*, 34(2), 123–127. <https://doi.org/10.1080/09593969.2024.2344152>
- Breugelmans, E., Altenburg, L., Lehmkuhle, F., Krafft, M., Lamey, L., & Roggeveen, A. L. (2023). The future of physical stores: Creating reasons for customers to visit. *Journal of Retailing*, 99(4), 532–546. <https://doi.org/10.1016/j.jretai.2023.10.005>
- Campo, K., Gijsbrechts, E., & Nisol, P. (2000). Towards understanding consumer response to stock-outs. *Journal of Retailing*, 76(2), 219–242. [https://doi.org/10.1016/S0022-4359\(00\)00026-9](https://doi.org/10.1016/S0022-4359(00)00026-9)
- DeHoratius, N., & Raman, A. (2008). Inventory record inaccuracy: An empirical analysis. *Management Science*, 54(4), 627–641. <https://doi.org/10.1287/mnsc.1070.0789>
- Gallino, S., & Moreno, A. (2014). Integration of online and offline channels in retail: The impact of sharing reliable inventory availability information. *Management Science*, 60(6), 1434–1451. <https://doi.org/10.1287/mnsc.2014.1951>
- Gao, F., & Su, X. (2017). Omnichannel retail operations with buy-online-and-pick-up-in-store. *Management Science*, 63(8), 2478–2492. <https://doi.org/10.1287/mnsc.2016.2473>
- Grewal, D., Benoit, S., Noble, S. M., Guha, A., Ahlbom, C.-P., & Nordfält, J. (2023). Leveraging in-store technology and AI: Increasing customer and employee efficiency and enhancing their experiences. *Journal of Retailing*, 99(4), 487–504. <https://doi.org/10.1016/j.jretai.2023.10.002>
- NearSt. (n.d.). NearSt. Retrieved July 14, 2025, from <https://www.near.st/>
- Rese, A., & Witthohn, L. (2025). Recovering customer satisfaction after a chatbot service failure: The effect of gender. *Journal of Retailing and Consumer Services*, 84, 104257. <https://doi.org/10.1016/j.jretconser.2025.104257>
- Schultz, C. D. (2025). Reimagining retail: Technology at the frontline, across the value chain, and toward sustainability. *Journal of Retailing and Consumer Services*, 87, 104449. <https://doi.org/10.1016/j.jretconser.2025.104449>

**SESSION 31.10: MARKETING EDUCATION REVIEW
SPECIAL ISSUE AND SYMPOSIUM I**

Moderators:

Emily Tanner

Summary Brief

Classrooms Without Walls: Leading Study Abroad vs. Staying Stateside

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In today's international marketplace, marketing educators face continued pressure to prepare students for culturally diverse, interconnected environments (Flaherty, 2021). Traditional classroom instruction alone often falls short in equipping students with the intercultural awareness, adaptability, and real-world problem-solving skills demanded by today's employers (Stuart, 2025). Prior research has highlighted that 40% of company executives believe their organizations have missed international business opportunities due to a shortage of employees with adequate international competence (Daniel et al., 2014). Enter study abroad, a uniquely immersive form of experiential learning that allows students to not just study culture, but live it. Yet, participation in experiential study abroad opportunities is limited (NAFSA, 2024), even though research has consistently shown the transformative aspects of these programs (Wright & Clarke, 2010).

Although much prior research in the study abroad literature has focused on the student perspective, limited research exists focusing on the faculty side. The goal of this research is to fill this gap by exploring the differences between faculty who have and have not led study abroad programs at a southeastern U.S. public university. Using survey responses from 133 faculty members, the research examines professional and motivational variables that influence participation. Findings reveal that those who have led study abroad programs tend to be satisfied with their experiences, report higher perceptions of student cultural competency gains, and are more likely to recommend such programs to peers. Additionally, experiential learning emerged as a central theme, with faculty highlighting the pedagogical value of immersive global education. Barriers to participation were also investigated. The study provides meaningful recommendations that universities could engage in to increase faculty participation in study abroad.

References

- Daniel, S. J., Xie, F., & Kedia, B. L. (2014). 2014 U.S. Business Needs for Employees with International Expertise. <https://goglobal.asu.edu/sites/default/files/2014-us-business-needs-for-employees-with-international-expertise.pdf>.
- Flaherty, C. (2021, April 5). What Employers Want: AAC&U Survey of Employers Shows Liberal Arts Skills are Valued and Sought Out in the Workplace but Raises Questions About Student Preparation. <https://www.insidehighered.com/news/2021/04/06/aacu-survey-finds-employers-want-candidates-liberal-arts-skills-cite-preparedness>
- NAFSA (2024). Trends in U.S. Study Abroad. <https://www.nafsa.org/policy-and-advocacy/policy-resources/trends-us-study-abroad>.
- Stuart, H. (2025). The Benefits of Learning Outside the Classroom. Educating Adventures. <https://www.easchooltours.com/blog/the-benefits-of-learning-outside-the-classroom>
- Wright, N. D., & Clarke, I. (2010). Preparing Marketing Students for a Global and Multicultural Work Environment: The Value of a Semester-Long Study Abroad Program. *Marketing Education Review*, 20(2), 149–162.

Summary Brief

Generative AI and Student Self-Efficacy in Marketing Writing

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This study focuses on evaluating whether an educational assignment can boost undergraduate students' self-efficacy in writing with generative AI (GenAI) tools for an ecommerce marketing course. Students were tasked with writing content on their own and with using AI-generated content; the students then engaged in reflective comparisons. We found that structured exposure did not build their confidence in using GenAI for content creation as expected. Instead, our results indicate that AI-specific self-efficacy remained statistically unchanged, while general writing self-efficacy declined. Implications of these findings and their application to marketing education are then discussed.

Introduction

GenAI is reshaping marketing practice at a rapid pace, and marketers are investing heavily in generative AI tools for content creation and optimization (Voss, 2025; Lee, 2024). A recent Harris Poll of 302 business-to-business (B2B) marketing professionals reported that 39 percent plan to rely on AI for content generation in the coming year (Madison Logic, 2024). Although AI has been in commercial use for several years, systematic discussion of its pedagogical implications has only recently appeared in marketing-education journals (Guha, Grewal, & Atlas, 2024). These developments compel marketing educators to decide how and when to introduce AI literacy while guarding against unintended effects on learning.

The advent of generative AI tools presents both opportunities and challenges in marketing education. Writing is a core skill for marketing professionals, integral to creating advertising copy, digital content, and business communications. Educators are thus keenly interested in technologies that can enhance writing instruction. However, it remains unclear whether using AI as a writing aid will bolster students' confidence in their writing abilities or inadvertently undermine skill development. Self-efficacy, defined by Bandura as one's belief in their capability to organize and execute actions needed to manage prospective situations, is a crucial determinant of learning and performance (Bandura, 1977). In the context of writing, self-efficacy refers to a student's confidence in planning, generating, and revising written work. High writing self-efficacy has been linked to greater persistence and better writing quality, making it an important educational outcome. Understanding how generative AI might alter students' writing self-efficacy is therefore of both practical and theoretical importance.

Recent industry and academic discussions underscore the need to integrate AI literacy into curricula to prepare students for a changing professional landscape. Marketing and public relations educators note that familiarity with AI tools is becoming essential for graduates entering the field. For example, Floridi and Chiriatti (2020) conclude that professional writers will increasingly need to leverage AI systems to generate and refine content. At the same time, academic bodies caution that students must learn not only how to use AI, but also when not to rely on it, to maintain critical thinking and originality. These perspectives frame GenAI as a double-edged sword in education: it can enhance productivity and creativity, yet may also pose ethical and skill-development concerns. Such concerns need to be addressed through thoughtful learning-based activities that can help students to learn these GenAI skills in effective and ethical ways (Duckett and Westrick, 2025). Gulati et al. 2024 have shown students acceptance and use of ChatGPT without much consideration for the risks involved in the use of GenAI. They suggest that ChatGPT be used as a tool in the classroom to provide students with the skills they need to prepare for their future careers and also streamline the process for how they do things.

Emerging research offers mixed insights into AI's effects on learner self-efficacy. Initial studies in language education contexts suggest that using AI can positively influence students' self-efficacy in writing. For instance, in an English as a Foreign Language setting, Huang and Mizumoto (2024) found that students who incorporated ChatGPT into writing tasks reported higher writing self-efficacy compared to those who did not. Similarly, a recent study of undergraduate students engaging in digital storytelling activities observed that generative AI support led to

improvements in their writing self-efficacy (Pellas 2023). AI tools such as IBM's Watson Tone Analyzer was used in marketing classes to help students to teach tone analysis which is important in connecting marketing messages with the target audience. In addition to learning and using the AI tool students were asked to record and reflect on what they had learned and were led by their teacher through a debrief dialoging with other students and the instructor about what they had learned and potential applications and future use of such technologies in the marketplace (Dingus and Black, 2021). Such findings imply that AI tools might serve as a form of scaffolding, enabling students to tackle writing challenges more confidently. On the other hand, scholars have raised concerns that over-reliance on AI could erode one's sense of competence. Writers who let AI perform most of the work might feel less capable when they have to write independently, potentially diminishing self-efficacy over time. This tension highlights a clear gap in the literature: while generative AI is increasingly used in educational writing tasks, its impact on student self-efficacy beliefs is not yet well understood, especially in the domain of marketing education.

To address this gap, this study investigates how the use of a generative AI writing assistant during a marketing writing assignment affects students' perceptions of writing self-efficacy. We focus on a cohort of marketing students and measure their self-efficacy perception with and without AI before and after completing an assignment with and without AI support.

In the following sections, we outline the relevant literature, describe our research method, present the results of our analysis, and discuss the implications for marketing education. The paper concludes with limitations and directions for future research.

Literature Review

Writing Self-Efficacy in Education

Self-efficacy theory (Bandura, 1977) provides the foundational lens for this study. Self-efficacy beliefs influence students' motivation and perseverance in learning tasks; in writing, higher self-efficacy often correlates with greater writing effort and achievement. Writing self-efficacy has been studied extensively in educational psychology, showing that students who believe in their writing capabilities tend to write more, use effective strategies, and produce better work. These beliefs are shaped by mastery experiences (e.g., prior writing successes), vicarious experiences (observing peers), verbal encouragement, and physiological states (Bandura, 1997). In marketing education, where written assignments can include marketing plans, advertising copy, and reports, building students' writing self-efficacy is important for their academic and professional development. If a new instructional tool or method (such as generative AI assistance) significantly alters the writing process, it is likely to affect the sources of efficacy information (for example, perceptions of mastery or the level of instructor feedback), thereby influencing self-efficacy judgments.

Generative AI in Education

Generative AI models like ChatGPT have demonstrated an ability to produce fluent written text, respond to prompts, and assist with tasks ranging from brainstorming to editing. Even the word processing software such as Microsoft Word, in which Microsoft has invested heavily, has integrated GenAI tools that students already use to perform spellchecking, grammar checking, and enhance writing through text predictions (Warren 2023). In educational practice, instructors and students have only recently begun experimenting with these tools for writing assignments. The potential benefits include providing instant feedback or suggestions, overcoming writer's block by generating ideas, and personalizing learning by allowing students to iterate on their drafts with AI input. Research and commentary in higher education note that generative AI could act as a "writing coach" or assistant, helping students improve grammar and style, which in turn might improve their confidence. For instance, one study reported that college students felt more confident in their written output when using an AI-based writing assistant, as it helped them identify errors and refine their work. In another case, undergraduate students using a web-based AI platform for a narrative writing project showed greater gains in self-reported writing confidence compared to those using conventional tools. These findings align with the idea that AI can augment the learning process by offering guidance and reducing the cognitive load on novice writers. It has also been suggested that the use of ChatGPT as part of marketing education can improve digital literacy, critical thinking, and problem-solving abilities among students, and helping them to refine their language and communication skills (Gulati, Saini, Singh, & Kumar, 2024). Using experiential learning theory as an approach to teaching AI in marketing education was encouraged in research by Dubay and Richards 2024, who suggested that in addition to teaching students by doing, there should also be a

reflexive learning component to this approach in order to help students to review and reflect on the skills that they are learning.

However, the literature also provides cautionary perspectives. Some educators argue that if students become overly dependent on AI suggestions, they might not develop critical writing skills or may doubt their own abilities without AI support. The critical use of AI is emphasized: students should learn how to leverage AI for enhancing their writing while still retaining agency and skill over the content. Theoretical frameworks from writing research suggest that self-regulated learning strategies play a role in mediating any effects of AI on writing outcomes. For example, students with strong self-regulation might use AI tools strategically (as a dictionary or thesaurus, or to get examples), thereby improving their skills and confidence, whereas less engaged students might use AI to do the work for them, potentially undermining learning. Thus, generative AI's impact on self-efficacy is likely not uniform but may depend on how the tool is used and the context of its use.

AI-Assisted Writing

Empirical studies on AI-assisted writing in classroom settings are still emerging. Huang and Mizumoto (2024) conducted an experiment in which one group of students wrote essays with ChatGPT assistance while a control group wrote without it. They found that the AI-assisted group reported slightly higher writing self-efficacy and motivation at the end of the course, although both groups improved to some extent. The authors suggest that AI can provide a form of scaffolding that particularly helps lower-efficacy students gain confidence by producing acceptable drafts more easily. Another study by Pellas (2023) examined undergraduate students creating digital stories with the aid of an AI platform versus a traditional approach. The AI group experienced significant gains in narrative creativity and a positive, though modest, increase in writing self-efficacy relative to the control. These results indicate the promise of AI tools to support learning.

Conversely, not all studies have found uniformly positive outcomes. Some case reports describe scenarios where students using AI felt uneasy about their own skills. In a pilot exercise in a public relations writing class, students were required to use a generative AI tool for certain assignments and then reflect on the process (Ryan 2024). While many students appreciated AI's help in generating ideas or first drafts, a few reported feeling that they were "cheating" or that they hadn't improved their own writing much as a result. This resonates with theoretical concerns that the easy success provided by AI might come at the cost of reduced perceived mastery. As one literature review noted, if AI handles the challenging aspects of writing, students may question their independent competence, potentially lowering self-efficacy in the long run. Clearly, the relationship between AI use and self-efficacy may be complex and bidirectional.

Conceptual Framework and Hypothesis Development

Based on the literature, it appears that generative AI can influence writing self-efficacy through two main pathways. First is a performance accomplishment pathway: AI assistance can lead to a higher quality final product (e.g., a well-written marketing plan or ad copy), which might be interpreted by the student as a success experience, thereby raising self-efficacy. Second is a cognitive processing pathway: AI can reduce anxiety and provide ideas, enabling students to engage more confidently with writing tasks. If these pathways dominate, we expect a net positive effect on self-efficacy. On the other hand, a countervailing mechanism is ability attribution: if students attribute the success of the task to the AI rather than their own skill, they might not internalize the success as a boost to self-efficacy or could even feel less capable. Our hypothesis reflects the predominant expectation from prior positive findings, but we remain open to the possibility of no change or negative change.

H1: Using a generative AI tool in a writing assignment will lead to an increase in students' writing self-efficacy (i.e., students will report higher self-efficacy after completing the AI-assisted writing task than before).

This hypothesis represents the view that AI assistance can serve as a confidence booster by helping students produce high-quality writing, thereby reinforcing their belief in their writing skills. To test our hypothesis, we conducted a quantitative analysis comparing pre- and post-assignment self-efficacy scores. This study tests our hypothesis in a marketing education context, contributing evidence to the growing conversation on AI in the classroom. In summary, we anticipated an increase in writing self-efficacy following an AI-assisted assignment, but we also recognized the potential for nuanced outcomes given the contradictory viewpoints in the literature.

Method

The study was conducted in an upper-division E-Commerce Marketing course (15 weeks, three credit hours) at a public university in the United States. Mid-semester, students completed a scaffolded “Human vs GenAI Content-Marketing” assignment that required them to (1) compose a 1,200-word article on backpack-material selection, (2) prompt ChatGPT to generate a parallel article, (3) compare the two pieces, (4) use the human draft as a seed prompt to create an AI-revised version, and (5) rank all three articles with justification Human vs GenAI Content. The assignment served as the treatment exposing students to hands-on AI writing.

Participants

20 undergraduate business majors enrolled in the course completed the pre-survey (Time 1); 19 completed the post-survey (Time 2) within one week after the assignment. Yielded 19 paired responses. Participation was voluntary and uncompensated; the study was approved by the university’s IRB.

Students completed an online baseline survey during class that measured writing self-efficacy both with and without AI and attitudes toward generative AI. Immediately after submitting the reflective comparison, students completed the identical post-survey. Surveys were administered through Qualtrics and took approximately 8 minutes to finish.

Measures

Writing Self-Efficacy.

General writing self-efficacy was assessed with the 12-item scale, adapted to marketing contexts on a 5-point Likert scale (1 = Not at all confident, 5 = Very confident). Cronbach’s $\alpha = .92$ (Time 1) and $.93$ (Time 2).

AI-Assisted Writing Self-Efficacy.

A parallel 12-item scale was developed to gauge confidence in planning, generating, and revising text with generative AI.

Future AI Use Intentions.

Three single-item, 4-point Likert questions captured likelihood of (a) using generative AI for future coursework, (b) using AI tools in one’s career, and (c) recommending AI tools to peers.

After screening for incomplete or inattentive responses, we conducted paired-samples t-tests comparing Time 1 and Time 2 means for each focal construct. All analyses were run in SPSS with $\alpha = .05$.

Results

Scale reliability and descriptive statistics

Internal consistency for the 12-item AI-Writing Self-Efficacy scale was acceptable at pretest ($\alpha = .72$) and good at post-test ($\alpha = .86$). The 12-item General Writing Self-Efficacy scale demonstrated satisfactory reliability at both waves ($\alpha_{pre} = .72$; $\alpha_{post} = .79$).

Test of the focal hypothesis

H1 predicted that exposure to a generative-AI writing tool would increase students’ writing self-efficacy. Contrary to expectations, a matched-samples t-test showed no significant change in AI-assisted self-efficacy, $t(18) = 0.38$, $p = .71$, $d = .09$. Mean scores were virtually identical from pretest ($M = 3.94$, $SD = 0.36$) to post-test ($M = 3.96$, $SD = 0.37$) on the 5-point scale.

Additional analysis: general writing self-efficacy

To assess possible spill-over effects, we examined students’ confidence in unaided writing. A significant decline emerged: $M_{pre} = 4.31$ ($SD = 0.33$) versus $M_{post} = 4.02$ ($SD = 0.39$), $t(18) = -3.75$, $p = .001$, $d = -0.86$.

Adoption intentions

Students’ likelihood of re-using or recommending generative AI showed only small, non-significant shifts: future coursework use increased by 0.14 points, $t(18) = 1.47$, $p = .16$, $d = .34$. career use decreased by 0.05 points, $t(18) = -0.46$, $p = .65$. recommending to peers increased by 0.12 points, $t(18) = 1.27$, $p = .22$.

The assignment did not bolster students’ perceived ability to write with AI, failing to support H1. Unexpectedly, it reduced confidence in traditional (unassisted) writing. These findings suggest a possible contrast or

social-comparison effect: viewing high-quality AI output may recalibrate students' self-assessment of their own skills.

Discussion

Interpretation of findings

In this study we set out to determine whether incorporating a generative-AI tool into a content-marketing writing assignment would raise students' writing self-efficacy. The data does not support that expectation. AI-specific self-efficacy remained statistically unchanged, while general writing self-efficacy declined. Two mechanisms may account for this pattern. First, students entered the exercise with already high confidence (means $\approx$ 4.0 on a 5-point scale), leaving little headroom for further gains. Second, direct exposure to polished AI drafts likely triggered an adverse comparison effect. Consistent with Bandura's (1997) mastery-experience principle, students who perceive external assistance as outperforming their unaided efforts may recalibrate their self-evaluations downward.

Notably, scale reliability increased from pre- to post-test for both efficacy constructs. Higher internal consistency suggests that students developed a more coherent mental model of their writing abilities after the intervention, even if that model was less favorable for unaided writing.

Contribution to marketing-education research

This study extends the growing literature on AI adoption in marketing classrooms by shifting the focus from performance outcomes to metacognitive beliefs. Prior scholarship has argued that AI tools can democratize creativity and lower skill barriers (Dwivedi et al., 2023). Our results caution that these benefits may not automatically translate into enhanced self-confidence. In fact, when a learning activity spotlights the superior output quality of AI, students' perceived competence may suffer. The findings therefore nuance the prevailing assumption that technological augmentation is unambiguously empowering and underscore the need to examine psychological side effects alongside skill acquisition.

Pedagogical implications

Instructors who use AI-based writing assistants should anticipate possible confidence erosion and design scaffolding to mitigate it. Three strategies follow from our data: Normalize iterative drafting. Position AI output as a peer-like first draft rather than a gold standard. Explicitly discuss how human judgment, voice, and contextual sensitivity remain indispensable for refinement. Promote mastery experiences. Require students to revise AI-generated text and compare the before-and-after product. Demonstrating tangible improvements attributable to their own effort may offset negative comparisons. Facilitate reflective attribution. Prompt students to articulate which elements of a final piece reflect their expertise versus the tool's contribution. Reflection can reinforce perceptions of personal agency.

If implemented thoughtfully, such design choices can preserve the motivational benefits of high self-efficacy while still leveraging AI for efficiency and idea generation.

Limitations

Several constraints temper the generalizability of the findings. The sample was limited to one upper-division marketing course at a single institution, and the matched-pair size ($n = 19$) offers modest statistical power. The survey relied on self-report; objective writing performance was not analyzed here. Finally, the study used a single exposure to AI in a short assignment. Repeated or longer-term use might yield different efficacy trajectories.

Directions for future research

Future work should explore longitudinal designs to track whether the observed decline in unaided writing efficacy persists, rebounds, or translates into measurable performance gains. Experimental manipulations could isolate social-comparison salience by varying the degree to which AI output is framed as exemplar versus baseline. Researchers should also test moderating variables such as prior AI familiarity, growth mindset, and writing-anxiety levels to identify student segments most at risk of confidence loss. Incorporating performance rubrics and peer assessments would allow triangulation between perceived and demonstrated competence.

Conclusion

The introduction of generative AI into a marketing writing assignment did not enhance students' confidence in AI-assisted writing and unexpectedly dampened their belief in their unaided writing skills. For marketing educators, the lesson is clear: technological innovation must be paired with pedagogical intent. Without guidance, AI can become a mirror that magnifies perceived shortcomings rather than a ladder that lifts capability. Thoughtful instructional design can ensure that AI serves as a catalyst for learning rather than a detractor from students' self-belief.

References

- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215.
- Dingus, R., & Black, H. G. (2021). Choose your words carefully: An exercise to introduce artificial intelligence to the marketing classroom using tone analysis. *Marketing Education Review*, 31(2), pp. 64-69. <https://doi:10.1080/10528008.2020.1843361>
- Dubay, C. M., & Richards, M. B. (2024). Leveraging Artificial Intelligence In Project-Based Service Learning To Advance Sustainable Development: A Pedagogical Approach For Marketing Education. *Marketing Education Review*, pp. 1-17. <https://doi:10.1080/10528008.2024.2411975>
- Duckett, J., & Westrick, N. M. (2025). Exploring the use, adoption, and ethics of generative artificial intelligence in the public relations and communication professions. *Communication Teacher*, 39(1), pp. 33-41. <https://doi:10.1080/17404622.2024.2395312>
- Floridi, L., & Chiriatti, M. (2020). GPT-3: Its nature, scope, limits, and consequences. *Minds and Machines*, 30(4), 681–694. <https://doi.org/10.1007/s11023-020-09548-1>
- Gulati, A., Saini, H., Singh, S., & Kumar, V. (2024). Enhancing learning potential: Investigating marketing students' behavioral intentions to adopt ChatGPT. *Marketing Education Review*, 34(3), pp. 201-234. <https://doi:10.1080/10528008.2023.2300139>
- Huang, J., & Mizumoto, A. (2024). Examining the effect of generative AI on students' motivation and writing self-efficacy. *Digital Applied Linguistics*, 1, 102324. <https://doi.org/10.29140/dal.v1.102324>
- Pellas, N. (2023). The effects of generative AI platforms on undergraduates' narrative intelligence and writing self-efficacy. *Education Sciences*, 13(11), 1155. <https://doi.org/10.3390/educsci13111155>
- Lee, S. H. (2024). Editorial: Equipping Students for Success. [Editorial]. *Marketing Education Review*, 34(3), pp. 173-174. <https://doi:10.1080/10528008.2024.2379626>
- Logic, M. (2024). New Survey from Madison Logic by The Harris Poll Reveals B2B Marketers Will Be Investing More in Social Media Advertising, AI Tools, Video and Podcasts in 2025. New York: Madison Logic. <https://www.prnewswire.com/news-releases/new-survey-from-madison-logic-by-the-harris-poll-reveals-b2b-marketers-will-be-investing-more-in-social-media-advertising-ai-tools-video-and-podcasts-in-2025-302333021.html>
- Ryan, S. (2024). Generative AI in the classroom: Teaching a critical skill for the public relations writing student. *Journal of Public Relations Education*, 9(3), 25–45.
- Warren, T. (2023). Microsoft is looking at OpenAI's GPT for Word, Outlook, and PowerPoint. *The Verge*. <https://www.theverge.com/2023/1/9/23546144/microsoft-openai-word-powerpoint-outlook-gpt-integration-rumor>
- Washington, J. (2023). The impact of generative artificial intelligence on writer's self-efficacy: A critical literature review. SSRN. <https://doi.org/10.2139/ssrn.4538043>

Summary Brief

Assessing Students' Motivation in Marketing Principles using the MUSIC Model in Varying Course Modalities

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Introduction

Higher education is undergoing a major transformation, and universities must invest in innovation, expand flexible learning, and align programs with market needs (Mintz, 2025). Traditional models are being challenged by changing student expectations, financial constraints, and evolving workforce needs. Online learning has seen a sharp rise in demand, signaling growing acceptance with many institutions now offering online programs (World Economic Forum, 2021). The benefits online learning offers are eliminating travel costs and time barriers, while Asynchronous formats provide added flexibility, allowing students to engage with material on their own schedule and from anywhere with a defining feature being the autonomy it gives learners (Kordrostami & Seitz, 2022).

As students increasingly consider access to quality online programs when choosing universities, there is greater pressure to improve online engagement and assessment (Bose & Ulrich, 2024). Research shows that since COVID, students' engagement, performance, and motivation have been negatively impacted and have struggled with increased anxiety and attention, compared to pre-pandemic peers (Corpus et al., 2022). In a national study, 79% of U.S. college students reported difficulty staying motivated during online learning (Means et al., 2020). Students reported reduced motivation, self-regulation, and increased stress after the shift to remote learning (Usher et al., 2021), with one-third citing motivation as their top pandemic-related challenge. Low motivation has been shown to contribute to higher dropout rates in online learning compared to face-to-face classes (Park & Yoo, 2021).

Learning motivation has been shown to significantly boost both engagement and effectiveness, with engagement further contributing to learning outcomes (Lei, Chen, & Luo, 2024). Since motivation forms the foundation for learning rather than emerging from it, recognizing students' motivations early in online courses is essential (Stephani et al., 2023). The MUSIC model of Academic Motivation (Jones, 2009) offers a framework to measure students' motivation. The model includes five components which have been proven success for students' academic engagement and success: eMpowerment (a student's perceived control over their learning), Usefulness (how much students believe the course material contributes to achieving their academic goals currently and in the future), Success (evaluates students' belief that they will be successful in the course given appropriate effort), Interest (the degree to which students find the course content and/or instructional activities engaging), and Caring (students' perception that the instructor and classmates genuinely care about their well-being).

Contribution, Goals of Study and Methodology

This research was informed by previous research from MacDermott et al., (2023). The goals of this study will be to contribute to academia and literature in several ways. First, limited research exists on student motivation in online programs, particularly in accelerated formats. This is especially relevant as the authors' university is launching a new accelerated undergraduate program. The findings will help to inform faculty, as they embark on offering relevant courses within this new program. Additionally, the study responds to the call for research addressing evolving student expectations for flexibility in marketing education, including the growing demand for online and asynchronous course formats and their implications for course design and delivery (Tanner & Rynarzewski, 2025).

A Qualtrics survey based on the MUSIC Model of Academic Motivation (Jones, 2009) will be emailed to traditional (14-week) online and in-person Marketing Principles students during the 2025–26 academic year. Initial results will guide the design of the first accelerated course, followed by a second survey to assess changes and their impact on student motivation.

References

- Bose, M., & Ulrich, H. (2024). Student Engagement and Assessment in an Asynchronous Online Learning Environment: The Importance of Instructional Design with Interactive Content. 32(1). *Journal for Advancement of Marketing Education*, 32 (1) 19-34.
- Corpus, J. H., Robinson, K. A., & Liu, Z. (2022). Comparing College Students' Motivation Trajectories Before and During COVID-19: A Self-Determination Theory Approach. *Frontiers in Education*, 7. <https://doi.org/10.3389/educ.2022.848643>
- Jones, B. D. (2009). Motivating Students to Engage in Learning: The MUSIC Model of Academic Motivation.
- Kordrostami, M., & Seitz, V. (2022). Faculty Online Competence and Student Affective Engagement in Online Learning. *Marketing Education Review*, 32(3), 240–254. <https://doi.org/10.1080/10528008.2021.1965891>
- Lei, H., Chen, C., & Luo, L. (2024). The examination of the relationship between learning motivation and learning effectiveness: A mediation model of learning engagement. *Humanities and Social Sciences Communications*, 11(1), 137. <https://doi.org/10.1057/s41599-024-02666-6>
- MacDermott, R., Mornah, D., & MacDermott, H. (2023). The Music Model of Academic Motivation in Action: Revising a Principles of Marketing Course Using Motivating Students by Design . *Journal for Advancement of Marketing Education*, 31(2).
- Means, B., Neisler, J., and Langer Research Associates. (2020). Suddenly Online: A National Survey of Undergraduates During the COVID-19 Pandemic. San Mateo, CA: Digital Promise.
- Mintz, S. (2025, April 14). Who will thrive, who will struggle and who will disappear? Inside Higher Ed. <https://www.insidehighered.com/opinion/columns/higher-ed-gamma/2025/04/14/who-will-thrive-who-will-struggle-and-who-will-disappear>
- Park, H. S., & Yoo, S. J. (2021). Early dropout prediction in online learning of university using machine learning. *JOIV: International Journal on Informatics Visualization*, 5(4), 347-353. <https://doi.org/10.30630/joiv.5.4.732>
- Stephani, N., Alvin, S., & Riatun. (2023). Exploring college students' motivations for choosing online learning program. *Cogent Education*, 10(2), 2266206. <https://doi.org/10.1080/2331186X.2023.2266206>
- Tanner, E., & Rynarzewska, A. (2025). Call for research: Society for Marketing Advances/MER Symposium and Special Issue: The Evolving Role of Marketing Education in a Rapidly Changing World. *Marketing Education Review*.
- Usher, E. L., Golding, J. M., Han, J., Griffiths, C. S., McGavran, M. B., Brown, C. S., & Sheehan, E. A. (2024). Psychology students' motivation and learning in response to the shift to remote instruction during COVID-19. *Scholarship of teaching and learning in psychology*, 10(1), 16. <https://doi.org/10.1037/stl0000256>
- World Economic Forum. Annual Report 2021-2022. https://www3.weforum.org/docs/WEF_Annual_Report_2021_22.pdf

**SESSION 33.1 PANEL: NAVIGATING ACADEMIA IN
NORTH AMERICA FOR EARLY CAREER
SCHOLAR/EDUCATOR**

Panelists:

Md Rokonuzzaman

Raj Srivastava

Md Al-Emran

Muhammad Mollah

Shahidul Islam

SESSION 33.2: RATINGS MODELS, REPUTATION SIGNALS, AND REAL-TIME ENGAGEMENT

Moderators:

Ensieh Alidadiani

Full Paper

Evaluating Ordinal vs. Generalized Ordered Logit Models: A Comparative Analysis for Star Rating

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Star ratings are important metrics for both customers and businesses. Identifying variables and modeling their effect on star rating are influential for consumer satisfaction analysis. Regarding the ordinal nature of ratings, two logistic regression models of ordinal logit (OLogit) and generalized ordered logit (GoLogit) are used to evaluate relations between independent variables and star ratings. Since the predictors have varying effects across different levels, the proportional odds assumption is violated. Therefore, it is necessary to model consumer star ratings using GoLogit method, in which parallel assumption is relaxed. This study compares the effectiveness of OLogit and GoLogit models in predicting star ratings. Our results on three datasets indicate that the GoLogit consistently provides a better fit with lower AIC, and slightly better predictive accuracy in out-of-sample approach. These findings suggest that GoLogit may be preferable for detailed variable interpretation across rating levels with limited advantage in predictive accuracy.

Introduction

With the increasing prevalence of e-commerce, online product reviews have become a key source of information for customers, retailers, and manufacturers alike. Online review ratings are the key component of electronic Word of Mouth (e-WOM), which refers to any positive or negative statement made by potential, actual, or former customers about a product or company and is available via the Internet (Thao & Shurong, 2020). Specifically, online review is a peer-generated evaluation posted for a specific product on the websites of a company or third parties (Garnefeld, Krah, Böhm, & Gremler, 2021).

For consumers, online reviews and ratings provided by other customers offer valuable product insights, helping to reduce uncertainty about their purchase decisions and the availability of online reviews has made it easier for consumers to get opinions from others before buying (Sunder, Kim, & Yorkston, 2019). Recent studies indicate that 91% of consumers regularly read online product reviews, and 84% place as much trust in these reviews as they do in personal recommendations (Kübler, Pauwels, Yildirim, & Fandrich, 2018).

Meanwhile, online retailers and manufacturers are increasingly leveraging customer feedback to enhance their marketing strategies (Engler, Winter, & Schulz, 2015). Various effects of online reviews on marketing factors, such as consumer decision-making and sales, are examined within the review consumption process (Liu, Lee, & Srinivasan, 2019). Positive reviews have been shown to boost consumers' intentions to purchase a product and increase their willingness to pay a higher price (Kübler, Pauwels, Yildirim, & Fandrich, 2018). For instance, a one-star improvement in a product's review rating is reported to lead to a 9% rise in sales and can prompt consumers to pay nearly 50 euros more for an eBook reader (Luca, 2011). Consumers showed a willingness to pay significantly more for products with an "excellent" (5-star) rating compared to those with a "good" (4-star) rating, with price premiums of 99% for legal services, 38% for hotels, and 20% for real estate agents. Managers benefit from analyzing online reviews to understand how product characteristics influence ratings. Specifically, insights into the social influence of online ratings offer valuable guidance on how to leverage them as part of marketing communication strategies (Sridhar & Srinivasan, 2012).

Online reviews are increasingly becoming a key method for assessing customer satisfaction, complementing other approaches. Established methods such as meeting expectations (Oliver, 1980), benchmarking (Matzler & Pechlaner, 2001), and direct assessment (El-Adly, 2019) have long been used to evaluate customer satisfaction. However, with advancements in information technology and data analytics, online review platforms offer a more accessible and contemporary approach. These digital tools allow businesses to efficiently gather customer feedback, making the evaluation process not only easier but also more in line with current consumer trends. Online reviews provide a simplified yet powerful tool for evaluating how well the product or service met the expectations of the buyer, offering businesses quick insights into customer experiences. (Engler, Winter, & Schulz,

2015) One of the biggest strengths of researching customer ratings is that ratings can show overall customer satisfaction in a direct way (Zhao, Xu, & Wang, 2019).

When customers evaluate a product, they often use comparative/ordered scales (i.e. Likert Scales) to show their level of satisfaction. Using the ordered analysis models would be an appropriate way to analyze the comparative ratings. Ordered scale Satisfaction analysis (e.g., 1 to 5 or "very unsatisfied" to "very satisfied") allows businesses to categorize and assess satisfaction levels systematically. These categorical evaluations capture customer sentiment in a structured manner and offer actionable insights into product or service performance (Morgan, Anderson, & Mittal, 2005). Categorical satisfaction ratings make it easier for companies to analyze trends and address specific issues within their products or services (Singh, 1991). Additionally, researchers have used ordinal scales as they reflect the gradations in satisfaction more intuitively than numerical scales (Sridhar & Srinivasan, 2012).

There are lots of research analyzed review data and explore how businesses can improve their ratings often focus on identifying the variables that influence star ratings. Most of them treat star ratings as continuous variables, overlooking the fact that star ratings are inherently ordinal (Gunasekar & Sudhakar, 2019). Linear regression models assume that the dependent variables are interval-scaled, which is not well-fitted to review rating analysis. Because of this assumption, applying least-squares regression to ordered categorical data introduces systematic estimation biases. When a continuous dependent variable is replaced with an ordinal scale and the relationship between the ordinal dependent variable and an independent variable is estimated using least squares, the estimated slope is flatter than the true relationship. As a result, regression estimates will be biased toward insignificance. This bias can lead to substantially different conclusions compared to those derived from an unbiased model (Chu & Anderson, 1992).

Ordered logit (OLogit) model can address continuous assumption of variables by treating star ratings as ordered (Sridhar & Srinivasan, 2012). The proportional odds assumption is fundamental for OLogit models, as it posits that the relationship between each pair of outcome categories remains consistent across thresholds. This means the effects of independent variables should be uniform regardless of which categories are being compared. Additionally, the independence of irrelevant alternatives is an important consideration; it implies that the odds of choosing one category over another are unaffected by other categories, ensuring that the model's structure remains valid. Another crucial aspect is the linearity of continuous predictors, which necessitates that their relationship with the log-odds of the outcomes should be linear (Williams R., 2016).

Independent variables like price or product quality can have different effects on customer satisfaction across the spectrum of star ratings. For low satisfaction levels, price might have a strong negative impact, while product quality plays a dominant role in determining ratings. At higher satisfaction levels, these variables may have diminishing effects. Using an OLogit in such cases might obscure these differences (Gangl, 2023). It is shown by (Williams R., 2016) that at lower levels of satisfaction, gender may have a stronger impact, with women being less likely than men to give extremely low ratings. However, as satisfaction increases to moderate levels, these gender differences may become smaller, reflecting more neutral or balanced evaluations. At the highest satisfaction levels, the effect of gender could further diminish, but the overall trend might still show that women are more likely to give slightly higher ratings than men. Using an OLogit in these contexts might fail to capture these variations and the constant effect of independent variables across all levels of the dependent variable may not hold true in all cases.

A generalized ordered logit (GoLogit) model would better reflect how the effects of independent variables differ across each satisfaction level. GoLogit estimates threshold-specific coefficient vectors to show different relationships between the covariates and the outcome categories at different thresholds. Specifically, the model can estimate different regression planes corresponding to thresholds, which enables it to capture variations in the effects of covariates on the probabilities of being in higher response categories (Williams R., 2006), (Agresti, Analysis of Ordinal Categorical Data, 2010). This flexibility is particularly useful in situations where the data suggests that the proportional odds assumption may not hold, allowing researchers to better model the underlying relationships in the data without being constrained by the assumption of uniformity across thresholds.

In this paper, we aim to address this gap by exploring the use of a GoLogit to evaluate the factors influencing customer star ratings. Unlike OLogit models, the GoLogit allows for varying effects of independent variables at different levels of the dependent variable, offering a more flexible and accurate representation of the relationship between variables.

Literature review

Ordinal logistic regression has been widely employed in marketing research to model customer ratings. This approach has proven valuable for exploring the determinants of customer satisfaction and online review behavior across diverse industries. For example, (Sridhar & Srinivasan, 2012) examine the social influence of other consumers' ratings on individual reviewers' evaluations. Their study reveals how prior ratings moderate the effects of product experience, failure, and recovery, emphasizing the dual-edged nature of high online ratings. Similarly, (Gunasekar & Sudhakar, 2019) investigates the drivers of hotel ratings in the Andaman & Nicobar Islands, identifying location as a key factor that increases ratings and room quality as a consistent determinant that reduces high scores. The analysis underscores the role of hotel attributes in shaping customer satisfaction across different property categories, such as luxury versus budget hotels. In another study focused on the U.S. beer market, researchers use ordinal logistic regression to explore the influence of reviewer expertise, community engagement, and brand characteristics on individual ratings. Their results highlight the distinctions between niche and mainstream brands, showing that niche brands are more susceptible to online word-of-mouth, while professional critics exert less influence compared to community-driven opinions (Hoskins, Gopinath, Verhaal, & Yazdani, 2021). Moreover, ordinal logistic regression has been applied to understand the influence of anthropomorphism in chatbot interactions on customer satisfaction and behavioral intentions and researchers' findings reveal that when customers engage with anthropomorphized chatbots in an angry emotional state, their satisfaction, overall firm evaluation, and subsequent purchase intentions decrease (Crollic, Thomaz, Hadi, & Stephen, 2022).

Ordinal logistic regression has also been effectively utilized in marketing research beyond customer ratings, particularly in studies examining consumer attitudes and behaviors. For instance, (Lee & Cheon, 2018) investigate how affective and cognitive components of attitudes influence ethical consumption behaviors. The study employs ordinal logistic regression to model the frequency of engaging in ethical behaviors, such as purchasing energy-saving products, buying organic foods, and participating in boycotts. The dependent variable, measured on an ordinal scale ranging from "never" to "always," captures the extent of ethical consumption. (Basu, Sebastian, & Kar, 2024) employs ordinal logistic regression to understand the factors influencing consumers' promoting intentions for mobile banking (m-banking) apps such as PhonePe and Paytm. The findings indicate that factors such as internet anxiety, perception of resources, and technology-trusting performance significantly affect promoting intentions for PhonePe, while technology-trusting expectation plays a critical role for Paytm. (Van Laer, Edson Escalas, Ludwig, & Van Den Hende, 2019) use ordinal logistic regression to model how narrativity features in consumer reviews affect outcomes such as narrative transportation and persuasion. Reviews with higher narrativity scores are found to be more engaging and persuasive, demonstrating the potential of narrativity to influence purchase decisions. (Van der Lans, Van Everdingen, & Melnyk, 2016) investigate the effects of brand benefits on brand purchase intentions across 25 countries and six product categories. By employing ordinal logistic regression, the study examines how intrinsic benefits (e.g., quality, uniqueness), leading position, and growing popularity influence consumer decisions, revealing cross-cultural differences in brand preference.

While ordinal logistic regression models have been used widely in marketing area, generalized ordered logit models are not employed in the research. Generalized ordered logit models have been widely used in econometrics and demonstrates an increasing application and flexibility of Generalized Ordered Logit models (GoLogit) in addressing diverse econometric problems across various domains. For example, latent segmentation approaches combined with GoLogit models have been employed to analyze driver injury severity, showcasing their ability to handle unobserved heterogeneity in crash-related factors (Yasmin, Eluru, Bhat, & Tay, 2014). Similarly, GoLogit models were used to examine household electricity consumption and housing quality determinants, emphasizing their effectiveness in modeling non-proportional odds when assumptions of parallel lines are violated (Aydin & Saracli, 2016) (Babalola & Mohd, 2021). In transportation safety, the GoLogit framework identified critical risk factors for bus accident severity, further illustrating its utility in policy-driven contexts (Kaplan & Prato, 2012). Moreover, studies on hotel customer ratings and alcohol-prevention campaigns leveraged GoLogit models to disentangle nuanced effects of facilities, sustainability features, and advertising on consumer decisions, reflecting their versatility in consumer behavior analysis (Abrudan, Pop, & Lazăr, 2020) (Witvorapong, Ratisukpimol, & Watanapongvanich, 2019). A Bayesian extension of GoLogit models, as proposed for rank-ordered preferences, highlights advancements in incorporating preference heterogeneity and improving estimation precision (Cheng, Ng'ombe, & Lambert, 2024). These studies underscore GoLogit models' adaptability in handling complex data structures, making them a popular and essential tool in econometrics for both policy formulation and behavioral analysis.

While ordinal logistic regression has been extensively used in marketing to analyze customer satisfaction and behavior, this study highlights the advantages of the generalized ordered logit (GoLogit) model in capturing varying effects of predictors across different rating levels. Exploring the limitations of the ordinal logistic regression models in the context of customer rating analysis and advocates for the adoption of the generalized ordered logit (GoLogit) model as a flexible alternative, we try to evaluate the better outcomes using GoLogit models as evidenced by AIC values and prediction accuracy.

Methodology

Linear regression models are usually applied to continuous dependent variables, where the relationship between independent and dependent variables is modeled using linear regression (Williams R. , 2006) . The equation for predicting and modeling customer satisfaction in this case would look like: [Equation]

In linear models, the dependent variable, Satisfaction, is assumed to be normally distributed and its relationship to the explanatory variables is linear.

As customer satisfaction and star rating is often measured with ordinal scales (e.g., on a 5-point Likert scale), the assumptions of linearity and normality are violated. So, linear regression models would not be appropriate and categorical models should be applied. As different categories in rating have an inherent ordering, the variables will treat as ordinal and ordered logistic models are appropriate for ordinal response variables. Ordered Logistic Models are specific type of Generalized Linear Models (GLM) and predict the log odds, odds, or probability of a response variable occurring at or below any given outcome category. These feature help accommodate the non-linearity and non-normality violation (Agresti, Analysis of Ordinal Categorical Data, 2010) , (Long & Freese, 2006) .

The outcome of customer satisfaction, as an ordinal category, is defined as the probability of being at or below the [Equation] category, and is generally denoted by: [Equation]

In which, [Equation] is the probability of having satisfaction level of i .

The probability of being above [Equation] category is gained as follows: [Equation]

The odds of the [Equation] cumulative probability is defined as the probability of being at or below the [Equation] category relative to being above the [Equation] category. The ordered logistic model predicts the log odds of the [Equation] cumulative probability as follows: [Equation]

[Equation] is the cumulative probability that customer satisfaction falls in category j or lower, and j represents a threshold between different levels of satisfaction. Intercepts of [Equation] correspond to the specific cutoff points for each satisfaction level and can vary in the outcome category (Erkan & Yildiz, 2014) . Moreover, coefficients ([Equation]) are assumed to be the same for all satisfaction levels. This is known as the proportional odds assumption, meaning the effect on the odds of being in a lower category versus a higher category remains the same regardless of the level of the dependent variable (Williams R. , 2016) .

The proportional odds assumption may be violated due to the nature of customer ratings. In such cases, ordered logistic models might overlook important factors and fail to fit properly. Therefore, it's essential to test the assumption of equivalent coefficients across all logits to ensure the OLogit model is suitable. If this assumption is violated, alternative models like the GoLogit model should be considered.

There are many methods to test the validity of the proportional odds assumption, namely Score Test, Likelihood Ratio Test, and Brant Test, which test the hypothesis that the coefficient is the same across all levels in the logit model (Azen & Walker, 2021) . The Brant test is a common method to check whether the effect of an independent variable varies across the levels of the dependent variable. This test evaluates the overall fit of the proportional odds assumption across all intercepts simultaneously. It essentially breaks down the ordered logistic model into $k-1$ binary logistic regression models. For each intercept j , a binary variable [Equation] is defined as 1 if the response category y is greater than j , and defined as 0 if y is less than or equal to j . This transformation allows the ordered logistic model to be viewed as a series of binary logistic regressions, one for each intercept j . The test

works by contrasting the estimated coefficients across the different intercepts and then combining these contrasts into a quadratic form. This is done to evaluate whether the coefficients for each predictor are statistically different across thresholds (Peng, Cui, Chung, & Li, 2019) .

If the proportional odds assumption does not hold, the GoLogit should be applied, though which the effects of predictors on different levels of the response variable should be separately evaluated (Liu & Koirala, Ordinal regression analysis: Using generalized ordinal logistic regression models to estimate educational data, 2012) . This approach is defined as: [Equation]

Where [Equation] is the coefficient for the [Equation] predictor at the [Equation] intercept. Unlike in the OLogit model, these coefficients can change with each intercept j , meaning that the effect of each predictor can differ depending on which category of the response variable is being considered. In a GoLogit model there are $j-1$ sets of coefficients, with each coefficient being estimated separately for each intercept j .

To illustrate that the generalized ordered logit model (GoLogit) is a better choice for modeling star ratings or not, it is essential to compare the performance of both models and use a real-world dataset around customer rating. our dataset aims to investigate the effects of explanatory variables on customer ratings. We first fit both the ordinal logit and generalized ordered logit models using an airline dataset, which provides relevant data on customer reviews and ratings. Following the model fitting, we systematically compare the results of the two models. Our comparison employs two approaches: within-sample and out-of-sample evaluations. The dataset is divided into training (80% of dataset) and test sets (remaining 20% of the dataset). The within-sample analysis focuses on the fit of the models based on the training dataset and provides insights into how well each model describes the dataset.

In the within-sample comparison, we fit both the ordinal logit and generalized ordered logit models on the training set and assess their fit using various statistical criteria. The fit of each model is primarily evaluated using pseudo- R^2 , Akaike Information Criterion (AIC), and Bayesian Information Criterion (BIC). Pseudo R^2 measures the proportion of variance explained by the model, while AIC and BIC help evaluate model fit in relation to its complexity (Hilbe, 2009) (Mei & Smith, 2020) . This within-sample analysis allows us to understand how effectively each model describes the training dataset. By assessing performance of the OLogit and Gologit models on the training data, we find how well the models capture relationships within the dataset; however, this approach does not test the models' ability to generalize to new data (Tanguma & Saldivar, 2014) . Additionally, the potential for overfitting can lead to an overly optimistic evaluation of the models' capabilities.

In the out-of-sample evaluation, we aim to enhance generalizability by reserving a portion of the data as a test set to provide a more accurate assessment of the models' performance on unseen data (Tsamardinos, Greasidou, & Borboudakis, 2018) . The training set is used to estimate the regression coefficients, and the test set is employed to evaluate model performance based on the coefficients. Common metrics such as accuracy (the percentage of correct predictions) and AUC (Area Under the Curve) are calculated on the test set to check the performance of the models. After fitting the models to the training data, we test their performance on the holdout portion, which was not used during training. This step is crucial for evaluating how well each model generalizes to new data.

By measuring the accuracy of predictions made by both Ordinal and generalized logit models, we gain insights into their practical applicability in real-world scenarios. This analysis also helps us determine which model is more reliable for forecasting customer ratings.

Applicable Datasets

Study 1- Airline

A) Dataset Description

Airline data set contains detailed information of customer feedback on different airlines, covering a wide range of flight aspects and is available for research in Kaggle. It covers meta data and date of flights, type of traveler, seat type and overall rating and other feature ratings include seat comfort, cabin staff service, Ground service, food and beverage, Wi-Fi and connectivity, and in-flight entertainment.

As a key step in our analysis, we removed duplicates and rows with missing values during data preprocessing. Due to the large number of missing values in the Wi-Fi & Connectivity and In-Flight Entertainment features—both of which are often offered at an additional cost—these two features were excluded from the analysis.

From 3290 records, after removing duplicates and missing values in five columns of dependent and independent variables, the total of 2,497 records remained.

Explaining the variables, this study just considers seat comfort, cabin staff service, ground service and food and beverage are considered as independent variables, and overall rating is defined as dependent variable. Table 1 shows the descriptive statistics of variables. Considering the same ranges for independent variables, we can evaluate their respective effects on the Overall Rating by their corresponding coefficients.

Table 1- Variables and their descriptive statistics in Airline Dataset

	N	Minimum	Maximum	Mean	Std. Deviation
Seat Comfort	2,497	1	5	2.84	1.35
Cabin Staff Service	2,497	1	5	3.25	1.48
Ground Service	2,497	1	5	2.92	1.43
Food Beverages	2,497	1	5	2.60	1.43
Overall Rating	2,497	1	5	2.67	1.44

Two software are used for the statistical analytics. SPSS software is mainly used for the Ordinal Logit modeling and statistical analytics. As SPSS software cannot perform the generalized logit models, R application is used to implement the generalized model on the dataset.

B) Ordinal Logit Regression Model of Airlines

The cleaned dataset is used to gain the Ordinal Logit Model results in SPSS software (Table 2). In this case, train set contains 80% of randomly selected data from all available data (Total of 1,997 samples). Test set contains the remaining portion of data (Total of 500 samples).

Table 2- Ordinal Logit Model results for Airlines

Intercept and coefficient	Value	Std. Error	z value	Pr(> z)
(Intercept):1	4.59	0.16	27.97	< 2e-16 ***
(Intercept):2	6.01	0.18	32.59	< 2e-16 ***
(Intercept):3	7.86	0.23	34.94	< 2e-16 ***
(Intercept):4	9.98	0.27	37.36	< 2e-16 ***
Seat Comfort	0.65	0.05	14.17	< 2e-16 ***
Food Beverage	0.66	0.05	13.63	< 2e-16 ***
Cabin Staff Service	0.26	0.04	5.91	1.06e-12 ***
Ground Service	0.67	0.04	16.31	< 2e-16 ***

Residual Deviance: 4,264.97 AIC: 4,280.97

Based on the significant threshold of 0.05, all variables in all levels are significant. Considering the Ordinal Logit explanation, the following formula is generated: [Equation]

It should be noted in SPSS the model is specified as follows (Azen & Walker, 2021) .
[Equation]

When using SPSS software, the results for intercepts would be the same but the coefficients' directions would be reverse. While the software packages produce the same intercepts the direction of the slopes is reverse due to the way in which the model is specified. (O'Connell & Amico, 2010) provide an explanation of different specification approaches used by SPSS when fitting proportional odds model. While the slope estimates have different signs their meaning and interpretation is the same.

The coefficients in this model indicate the expected change in the odds of being in a higher satisfaction category for a one-unit increase in each predictor variable. For instance, the coefficient of 0.65 for Seat Comfort means that for every one-unit increase in seat comfort, the odds of being in a lower satisfaction category decrease by a factor of $e^{0.65} \approx 1.916$. In other words, as seat comfort improves, there is a 1.916 increase in the likelihood of attaining a higher satisfaction level. This positive association implies that better seat comfort strongly contributes to higher satisfaction ratings. Associated P-values of all independent variables indicates that they are statistically significant. In overall, the results show that seat comfort, food beverage, cabin staff service, and ground service are significant predictors of overall value for money. The model fit statistics, shown as AIC, confirms that the model captures the relationships in the data.

C) Brant Test

When implementing Ordinal Logit models, the proportional odds assumption should be checked to be sure that the model is sound and reliable. The Brant Test is done using the R app and all the data set. Results are summarized in Table 3.

Table 3- Results of Brant Test for Airlines

Test for:	[Equation]	df	P-Value
Omnibus	59.16	12	3.2e-08
Seat Comfort	11.03	3	1.1e-02
Food Beverage	10.74	3	1.3e-02
Cabin Staff Service	9.17	3	2.7e-02
Ground Service	3.74	3	2.9e-01

The Omnibus with an extremely small p-value (much less than 0.05) indicates a strong rejection of the null hypothesis (H_0 : the parallel regression assumption holds). This suggests that the proportional odds assumption is violated in the Ordinal Logit model meaning that at least one of the independent variables has different effects across the levels of the dependent variable. So, while the Ordinal Logit results seem to be good, the Brant Test shows that the assumption is violated, and the results is not acceptable. For Seat Comfort, the Chi-squared value is 11.03 with 3 degrees of freedom and a p-value of 1.1e-02. This p-value indicates that seat comfort significantly varies in its effect across the rating categories. A p-value of 1.3e-02 and 2.7e-02 for food beverage and Cabin Staff Service respectively indicate that these variables have a differing effect across the rating levels. Just for ground services, a Chi-squared value of 3.7 with 3 degrees of freedom, p-value of 2.9e-01 shows that it does not violate the proportional odds assumption and has a consistent effect across the rating levels.

D) Generalized Ordinal Logit Regression Model of Airlines

As the proportional odds assumption is violated for most of the independent variables, then GoLogit should be used to be able to consider different coefficients for independent variables in different levels. Following the same

procedure, GoLogit model is fitted on 80% of available data as train set, and 20% of the data as test set. Results are shown in Table 4.

We used the VGAM package in R. The Vector Generalized Additive Models package (VGAM) provides a flexible framework for fitting a wide variety of statistical models, including the generalized ordered logit model (Gologit). This package is particularly useful for models where the traditional proportional odds assumption (as in ordinal logistic regression model) does not hold.

Table 4- Generalized Ordered Logit Model (Out-of-Sample case) for Airlines

Intercept and coefficient	value	Std. Error	z value	Pr(> z)
(Intercept):1	3.86	0.21	18.57	< 2e-16 ***
(Intercept):2	6.00	0.25	24.10	< 2e-16 ***
((Intercept):3	9.07	0.38	23.74	< 2e-16 ***
(Intercept):4	10.78	0.62	17.35	< 2e-16 ***
Seat Comfort.:1	-0.54	0.06	-9.10	< 2e-16 ***
Seat Comfort.:2	-0.63	0.06	-10.54	< 2e-16 ***
Seat Comfort.:3	-0.79	0.08	-10.58	< 2e-16 ***
Seat Comfort.:4	-0.71	0.11	-6.79	1.14e-11 ***
FoodBeverage:1	-0.52	0.07	-7.61	2.71e-14 ***
FoodBeverage:2	-0.68	0.06	-10.67	< 2e-16 ***
FoodBeverage:3	-0.69	0.07	-9.71	< 2e-16 ***
FoodBeverage:4	-0.63	0.10	-6.39	1.70e-10 ***
CabinStaffService:1	-0.19	0.05	-3.39	6.96 e-04 ***
CabinStaffService:2	-0.27	0.06	-4.85	1.23e-06 ***
CabinStaffService:3	-0.38	0.08	-5.01	5.59e-07 ***
CabinStaffService:4	-0.43	0.13	-3.23	1.231e-3 **
GroundService:1	-0.64	0.05	-11.98	< 2e-16 ***
GroundService:2	-0.62	0.05	-12.22	< 2e-16 ***
GroundService:3	-0.70	0.06	-11.13	< 2e-16 ***
GroundService:4	-0.65	0.09	-6.87	6.53e-12 ***

AIC for Generalized Ordered Logit Model: 4,267.91

The intercepts represent the thresholds for transitioning between the different rating categories. All intercepts are statistically significant ($p < 2e-16$) which means the thresholds are well-defined. The coefficients for seat comfort across different levels are all significant and the model fit statistics, shown as AIC, confirms that the model captures the relationships in the data.

[Equation]

[Equation]
[Equation]
[Equation]

Each equation corresponds to the cumulative probability of being in a certain rating category or below and their coefficients are different in various categories. The negative signs for all predictors indicate that as these service aspects improve, the overall customer rating tends to shift toward higher categories. The increasing intercepts show that the model captures the increasing difficulty of moving into higher satisfaction categories.

E) Within-sample comparison of the models

The two measures of Bayesian Information Criterion (BIC) and Akaike's Information Criterion (AIC) are suggested for comparing the relative plausibility of two models (Williams R. , 2016) . The AIC value represents a trade-off between the goodness of fit and complexity of the model by penalizing the maximization of the likelihood function as the number of parameters increases. A lower AIC value indicates a better-fitting model (Akaike, 1974) and a difference of more than 10 units between two model is often considered strong evidence that the model with the lower AIC is preferable (Anderson & Burnham, 2002) . Based on our AIC results for Ologit (4,280.97) and GoLogit (4,267.91), the generalized ordered logit model strongly favors as its AIC is 13.1 units less than ordinal logit model.

F) Out of sample comparison of the Models

Out of sample evaluation provides insight into how well the model generalizes beyond the data on which it was trained, which is crucial for understanding its practical applicability (Hastie, 2009) . To evaluate and compare the predictive accuracy of the ordinal logit model and the generalized ordered logit model, we used an out-of-sample approach through a cross-validation procedure. Specifically, we employed 10-fold cross-validation, a commonly used technique that provides a more reliable estimate of model performance on new data (James, 2013) . In each fold of cross-validation, the dataset was split such that 80% of the data served as the training set, and the remaining 20% was set aside as the test set. The model was fitted on the training set, where the coefficients for each explanatory variable (e.g., Seat Comfort, Food Beverage, Cabin Staff Service, and Ground Service) were estimated. These estimated coefficients were then used to predict the overall rating in the test set.

For each observation in the test set, the model generated a predicted rating. We compared these predicted ratings to the actual ratings to calculate the accuracy of the model, which is the percentage of correct predictions made by the model on the test data. This accuracy rate represents the model's ability to generalize to unseen data, a crucial indicator of its out-of-sample performance (Anderson & Burnham, 2002) . This process was repeated 10 times with different random splits of the data, for obtaining a distribution of accuracy rates across the folds. By using the average of accuracy across these 10 splits, we have a stable estimate of the model's predictive performance on new data, which is minimized the influence of any single random split (Kohavi, 1995) .

The results of this out-of-sample comparison show that the average accuracy across 10 splits for the ordinal logit model was 53.54%, whereas the generalized ordered logit model achieved an average accuracy of 54.72%. Although the improvement is minor, the generalized ordered logit model demonstrates slightly better predictability on unseen data, indicating that its additional flexibility in accommodating non-proportional odds may enhance its generalizability.

Study 2- Beer Advocate

A) Dataset Description

In this study, we compare the Ordinal Logit Model and Generalized Logit Model by using an alternative dataset on customer ratings: the BeerAdvocate dataset, a comprehensive resource available for academic research. The BeerAdvocate dataset contains beer reviews gathered over more than a decade, with approximately 1.5 million reviews recorded up to mid 2012. Each review includes detailed ratings across five key aspects—appearance, aroma, palate, taste, and overall impression—offering a multidimensional view of customer satisfaction. The dataset also incorporates essential metadata, such as product and user information, along with a plaintext review, providing qualitative insights into consumer experiences.

In this analysis, we extracted a subset of data covering the 2009–2012 period, resulting in a total of 135,713 records. This subset was carefully preprocessed, with duplicate entries and records containing missing values removed to ensure data quality and consistency. Table 5 presents the descriptive statistics of the cleaned dataset variables, offering an overview of the key characteristics and distributions within this sample.

Table 5- Variables and their descriptive statistics of Beer Dataset

Variables (Review rates)	N	Minimum	Maximum	Mean	Std. Deviation
Overall Rating	135,713	1	5	3.22	1.35
Aroma	135,713	1	5	3.40	0.96
Appearance	135,713	1	5	3.61	0.83
Palate	135,713	1	5	3.38	0.97
Taste	135,713	1	5	3.34	1.09

B) Ordinal model logit result for Beer dataset

The cleaned dataset is utilized to obtain the Ordinal Logit Model results, as shown in Table 6, by using the MASS library in R. The dataset is split into train set and test set. The training set comprises 80% of the data, randomly selected from the total available data, contains to 108,571 samples. The test set consists of the remaining 20%, totaling 27,142 samples.

Table 6- Ordinal Logit Model results for Beer

Intercept and coefficient	Value	Std. Error	z value	Pr(> z)
(Intercept):1	8.22	0.04	193.20	2e-16 ***
(Intercept):2	11.54	0.05	221.12	< 2e-16 ***
(Intercept):3	14.51	0.06	238.93	< 2e-16 ***
(Intercept):4	16.89	0.07	257.43	< 2e-16 ***
Aroma	0.20	0.01	16.68	< 2e-16 ***
Appearance	0.08	0.01	6.55	5.97e-11 ***
Palate	1.05	0.01	79.92	< 2e-16 ***
Taste	2.63	0.02	173.72	< 2e-16 ***

Residual Deviance: 188,961.2 AIC: 188,977.22

The intercepts, ranging from 8.2 to 16.9, represent the thresholds between categories in the ordinal scale. Each intercept is highly significant with p-values less than 2e-16. Aroma, Appearance, Palate, and Taste is statistically significant and are contributing to overall rating.

Considering the Ordinal Logit explanation, the following formula is generated:

[Equation]

Like our approach with the airline dataset, we conducted the Brant test. The results indicate that the parallel regression assumption does not hold for any of the independent variables.

C) Generalized ordered logit model for Beer dataset

Since the proportional odds assumption is violated for all the independent variables, the Generalized Ordered Logit (GoLogit) model should be used. This approach allows for different coefficients for independent variables across different levels of the dependent variable. We used the VGAM package in R.

Table 7- Generalized Ordered Logit Model (Out-of-Sample case) for Beer

Intercept and coefficient	value	Std. Error	z value	Pr(> z)
(Intercept):1	6.99	0.07	101.03	< 2e-16***
(Intercept):2	12.35	0.10	129.71	< 2e-16***
(Intercept):3	15.79	0.11	145.21	< 2e-16***
(Intercept):4	16.84	0.13	129.42	< 2e-16***
Aroma:1	-0.18	0.02	-8.46	< 2e-16***
Aroma:2	-0.17	0.02	-7.78	7.6e-15***
Aroma:3	-0.25	0.02	-12.22	< 2e-16***
Aroma:4	-0.27	0.02	-11.91	< 2e-16***
Appearance:1	0.10	0.02	4.75	2.02e-6***
Appearance:2	-0.06	0.02	-2.74	0.00623**
Appearance:3	-0.23	0.02	-11.30	< 2e-16***
Appearance:4	-0.32	0.02	-14.42	< 2e-16***
Palate:1	-0.68	0.02	-29.64	< 2e-16***
Palate:2	-1.10	0.02	-46.90	< 2e-16***
Palate:3	-1.32	0.02	-58.92	< 2e-16***
Palate:4	-1.25	0.03	-49.57	< 2e-16***
Taste:1	-2.74	0.03	-91.78	< 2e-16***
Taste:2	-2.90	0.03	-106.11	< 2e-16***
Taste:3	-2.51	0.03	-99.37	< 2e-16***
Taste:4	-2.13	0.03	-77.36	< 2e-16***

AIC for Generalized Ordered Logit Model: 187,653.4

The intercepts in Table 7, ranging from 6.99 to 16.84, are all highly significant ($p < 2e-16$). The results indicate that Aroma, Appearance, Palate, and Taste each have distinct impacts on the likelihood of achieving higher ratings. Considering the same ranges for independent variables, Taste and Palate emerge as the most influential factors, with strong coefficients across all thresholds, signifying their importance in driving higher ratings. Aroma and Appearance also contribute significantly, though their effects vary across thresholds.

The equation corresponds to the cumulative probability of being in a first rating category is:

[Equation]

And for level 2 and 3 and 4 of rating, are the same with different intercept and coefficients. The negative signs for all predictors indicate that as these service aspects improve, the overall customer rating tends to shift toward higher categories.

D) Within sample comparison

In model selection, a lower AIC indicates a better balance between goodness of fit and model complexity. Based on our AIC results for the Ordinal Logit Model and the Generalized Ordered Logit Model applied to the Beer Advocate dataset, the comparison reveals a substantial difference in model fit. The AIC for the ordinal logit model is 188,977.22, whereas the generalized ordered logit model achieves a significantly lower AIC of 187,653.4. This difference of more than 1,300 units strongly favors the generalized ordered logit model as the better-fitting model for this dataset. Such a large discrepancy in AIC values provides strong evidence that the generalized ordered logit model is more appropriate for modeling the rating categories in the Beer Advocate dataset, likely due to its ability to accommodate varying effects across thresholds. By relaxing the proportional odds assumption, the generalized ordered logit model offers greater flexibility, which appears essential in accurately representing the relationships in this dataset.

E) Out of sample comparison

The accuracy comparison between the ordinal logit model and the generalized ordered logit model for the Beer dataset shows that both models perform similarly, with only a slight improvement observed in the generalized ordered logit model. The ordinal logit model achieved an accuracy of 62.8%, while the generalized ordered logit model reached 63.15%. These accuracy values represent the average results from a 10-fold cross-validation, ensuring that the difference is not due to random variations in the splitting of training and test data. Although the difference is minimal, it suggests a marginal improvement in predictive performance with the generalized ordered logit model, likely due to its added flexibility.

Study 3- Snapchat Review

A) Dataset Description

The dataset used for third study is sourced from the Open ML website containing reviews from the Google Play Store for Snapchat. Originally, this dataset was collected to analyze users' adoption of the Android version of Snapchat, which the company claims has recently undergone significant improvements. The data also aims to assess whether the app is redefining the use of the camera and changing the way people interact with their close contacts. However, in this study, we used the dataset for comparing two types of ordinal logistic regression. The dataset includes around 42,000 reviews spanning from September 2018 to November 2019. It includes several key features, such as Star Rating, Review Text, and Helpfulness Score, and after cleaning and some preprocessing, the total of 32,686 records are ready for the analytics.

For our analysis, some additional features were extracted to provide the variables that seem to have impact on overall rating. In marketing literature, customer sentiment is widely recognized as a critical factor in understanding consumer attitudes and behaviors (Liu B. , 2022) . Sentiment scores, often quantify the emotional tone or valence of each review, offering insights into the reviewer's perceived experience with the product and captures the reviewer's actual experience, as expressed through their text. A positive score indicates satisfaction, while a negative score reflects dissatisfaction, aligning with prior studies that show sentiment as a strong predictor of consumer satisfaction and future engagement (Berger, Moe, Netzer, & Schweidel, 2020)

Additionally, recent reviews have a strong influence on consumer perception, as prospective customers are more likely to rely on the most recent feedback available when forming their opinions (Sridhar & Srinivasan, 2012) . To capture this influence, we included a feature that calculates the average sentiment score of the five most recent reviews. This average sentiment score provides an indicator of the prevailing sentiment that the current reviewer may have encountered, reflecting the collective recent experience of other consumers. By focusing on the five most recent reviews, which has been shown to affect their expectations. This approach, consistent with marketing research on social influence and herd behavior (Moe & Trusov, 2011) , allows us to examine how the current reviewer's rating might be shaped by the recent sentiment expressed by others. Based on the information provided above, we have explained the rationale for extracting these features from our dataset as follow.

- sentiment: This feature represents the emotional tone of each review, quantified on a scale from -1 to 1, where -1 denotes a fully negative sentiment and 1 represents a fully positive sentiment. This enables a more detailed understanding of customer satisfaction by linking both the explicit (rating) and implicit (sentiment) evaluations conveyed in the feedback.

- Others Sentiment: This feature represents the mean sentiment score of the five reviews preceding a given review, offering a benchmark for how recent feedback trends might influence the current review. By providing a sense of the recent sentiment context, it allows us to assess whether new reviews align with or differ from the tone of recent opinions.
- Number of Characters in the Review: This feature represents the length of each review, measured by the total number of characters. It provides insight into the level of detail or depth the reviewer chose to include, as longer reviews may reflect a more detailed opinion. Analyzing review length allows us to examine whether the amount of detail in a review correlates with the rating, providing insight into whether more elaborate feedback is associated with higher or lower satisfaction levels.

Our focus here is mainly on obtaining a dataset with features that have influential effect on customer ratings, rather than on the individual validity or accuracy of each extracted feature. Sentiment analysis was performed using Python, utilizing the TextBlob and VADER (Valence Aware Dictionary and Sentiment Reasoner) libraries, which are widely recognized for extracting sentiment valence from textual data (Hutto & Gilbert, 2014). Table 8 presents the descriptive statistics of the cleaned dataset variables, offering an overview of the key characteristics and distributions within this sample.

Table 8- Variables and their descriptive statistics of Beer Dataset

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Star Rating	32,686	1	5	2.89	1.59
Sentiment	32,686	-1	1	0.15	0.33
Other's Sentiment	32,686	-0.57	0.8	3.49	0.16
Review length	32,686	11	1421	158	127

B) Ordinal model logit result for Snapchat

The cleaned dataset is utilized to obtain the Ordinal Logit Model results, as shown in Table 9, by using the MASS library in R. The dataset is split into train set and test set. The training set comprises 80% of the data, randomly selected from the total available data, contains to 26,148 samples. The test set consists of the remaining 20%, totaling 6,538 samples.

Table 9- Ordinal Logit Model results for Snapchat

Intercept and coefficient	Value	Std. Error	z value	Pr(> z)
(Intercept):1	-0.65	0.03	-24.52	<2e-16 ***
(Intercept):2	0.08	0.03	3.01	0.00245 **
(Intercept):3	0.90	0.03	33.62	< 2e-16 ***
(Intercept):4	1.78	0.03	62.34	< 2e-16 ***
Other's Sentiment	0.64	0.07	8.73	< 2e-16 ***
Sentiment	3.56	0.04	81.63	< 2e-16 ***
Review Length	-0.002	9.434e-05	-16.01	< 2e-16 ***

Residual Deviance: 71,255.14

AIC: 71,269.14

Considering the Ordinal Logit explanation, the following formula is generated:

[Equation]other's Sentiment [Equation]Review Length[Equation]

The coefficient for Other's Sentiment (0.64, $p < 2e-16$) indicates that for each unit increase in the average sentiment of the previous five reviews, the odds of a review falling into a lower rating category increase by a factor of approximately [Equation] ≈ 1.90 . This finding suggests that exposure to recent positive sentiment influences a reviewer's likelihood of assigning a similar rating, aligning with theories of social influence and conformity in consumer behavior. The individual Sentiment score of each review shows an even stronger effect, with a coefficient of 3.56 ($p < 2e-16$), indicating that a one-unit increase in sentiment (from negative to positive) increases the odds of a higher rating category by a factor of approximately [Equation] ≈ 35.26 . This substantial impact highlights the importance of individual emotional expression in shaping customer ratings. While Review Length is statistically significant (coefficient ≈ 0 , $p < 2e-16$), its practical effect on rating likelihood is minimal. The near-zero coefficient for review length may be due to its large numerical range, spanning from 11 to 142,000 characters. Despite this, the significant p-value indicates that review length has a meaningful effect on rating. Specifically, the coefficient suggests that as the length of a review increases, the likelihood of receiving a higher rating decrease. Normalizing review length could enhance the interpretability of this relationship by aligning it with the scales of other variables in the model.

C) Brant Test

The Brant Test is conducted on this model to determine whether the explanatory variables have varying effects on the rating, using the full dataset and performed in R. The results are summarized in Table 10.

Table 10- Results of Brant Test for Snapchat

Test for:	[Equation]	df	P-Value
Other's Sentiment	947.19	9.00	6.3e-08
Sentiment	36.34	3.00	6.8e-110
Review Length	508.51	3.00	2.5e-51

Each independent variable in this table shows a significant p-value, suggesting that their effects on the rating vary across levels. These findings support the use of the generalized ordered logit model, as it accommodates differences in the influence of predictors across categories, providing a more flexible approach than the ordinal logistic model.

D) Generalized Ordinal Logit Regression Model in Snapchat

Due to the violation of the proportional odds assumption for most independent variables, the generalized ordered logit (GoLogit) model was fitted on an 80% training set, with the remaining 20% held out as a test set. The results are presented in Table 11. Using a similar approach, the GoLogit model was implemented in R using the VGAM package.

Table 11- Generalized Ordered Logit Model (Out-of-Sample case) for Snapchat

Intercept and coefficient	value	Std. Error	z value	Pr(> z)
(Intercept):1	-0.50	0.03	-16.89	< 2e-16
(Intercept):2	0.13	0.03	4.37	1.25e-05
(Intercept):3	0.89	0.03	27.68	< 2e-16
(Intercept):4	1.71	0.04	42.69	< 2e-16
Other's Sentiment:1	-0.32	0.09	-3.55	3.9e-4

Other's Sentiment:2	-0.61	0.09	-7.10	1.22e-12
Other's Sentiment:3	-0.72	0.09	-8.21	< 2e-16
Other's Sentiment:4	-0.84	0.10	-8.53	< 2e-16
Sentiment:1	-2.92	0.05	-55.39	< 2e-16
Sentiment:2	-3.34	0.05	-64.67	< 2e-16
Sentiment:3	-3.79	0.05	-70.75	< 2e-16
Sentiment:4	-3.84	0.06	-65.08	< 2e-16
Review_Length:1	0.000	1.1e-4	3.81	1.4e-4
Review_Length:2	0.001	1.1e-4	12.90	< 2e-16
Review_Length:3	0.002	1.3e-4	18.47	< 2e-16
Review_Length:4	0.003	1.6e-4	18.57	< 2e-16

AIC for Generalized Ordered Logit Model: 70,600.48

The equation corresponds to the cumulative probability of being in a first rating category is: [Equation] and again, for level 2 and 3 and 4 of rating, are the same with different intercept and coefficients.

As it can be seen in Table 11, all the features have significant effect on shaping the rating in all different levels. Coefficients for Other's Sentiment range from -0.32 to -0.84 across thresholds, with each coefficient being statistically significant. This associations suggest that higher average of 5 recent sentiments reduces the likelihood of a lower rating, with the effect becoming stronger at higher thresholds. This pattern indicates that recent positive sentiments among previous reviewers increases the probability of higher ratings for the current review, reflecting the influence of recent feedback on rating behavior.

The Sentiment variable shows even stronger effects, with coefficients ranging from -2.92 to -3.84, all highly significant ($p < 2e-16$). The consistently large coefficients indicate that individual positive sentiment significantly decreases the odds of a lower rating.

Opposed to current sentiment and Other's Sentiment, coefficients of Review Length indicates that the higher length of the review decreases the likelihood of getting higher ratings.

E) Within sample comparison

Based on our AIC results for the Ordinal Logit Model and the Generalized Ordered Logit Model applied to the Snapchat dataset, the comparison reveals a substantial difference in model fit. The AIC for the ordinal logit model is 71,269.14, whereas the generalized ordered logit model achieves a significantly lower AIC of 70,600.48. This difference of more than 600 units strongly favors the generalized ordered logit model as the better-fitting model for this dataset. Such a large discrepancy in AIC values provides compelling evidence that the generalized ordered logit model is more appropriate for modeling the rating categories in this dataset, likely due to its ability to accommodate varying effects across thresholds. By relaxing the proportional odds assumption, the generalized ordered logit model offers greater flexibility, which appears essential for accurately capturing the complex relationships in customer ratings for Snapchat.

F) Out of sample comparison

The accuracy comparison between the ordinal logit model and the generalized ordered logit model for the Snapchat dataset also shows similar performance, with only a slight improvement in the generalized ordered logit model. The ordinal logit model achieved an average accuracy of 47.91%, while the generalized ordered logit model

reached 47.97%. These values represent the average results from a 10-fold cross-validation, reducing the influence of random variations in the train-test splits. However, given the small margin, both models perform similarly in predicting ratings for this dataset.

Discussion

Our analysis highlights the comparative performance of the ordinal logit and generalized ordered logit models across three datasets. Consistently, the generalized ordered logit model demonstrates better fit, as shown by lower AIC values in each case. However, while AIC values favor the generalized ordered logit model, out-of-sample predictive accuracy shows very limited improvements.

The impact of key variables on star ratings often varies across different rating levels. Moreover, the proportional odds assumption is mostly violated as confirmed in our Brant Tests on the three datasets. Thus, the use of the ordinal logistic approach becomes questionable for modeling the star rating. Then, the generalized ordered logit model should be employed as an alternative approach with relaxed parallel assumption.

For all of our datasets the AICs of the generalized ordered logit models were significantly better fitted than ordinal logit models with lower AIC values of 1300, 600, and 13 for Beer, Snapchat, and Airline datasets consecutively. But regarding the accuracy, the generalized ordered logit model achieved a minor accuracy gain in all the cases as we got 54.72% for GoLogit and 53.54% for logit in the Airline dataset. Having same minimal improvement accuracy in Beer dataset (63.15% vs. 62.8%) and Snapchat (47.97% vs. 47.91%) shows that the use of the generalized ordered logit model may not be strongly recommended, as it did not yield a significant improvement in accuracy.

If the objective is to interpret the varying effects of a predictor across different rating levels, the generalized ordered logit model is recommended. However, if the goal is to understand the overall impact of a specific variable on star ratings, the ordinal model may suffice, offering fewer coefficients and lower computational demands. While the generalized ordered logit model offers flexibility in capturing variations across rating levels, the choice between models should balance both interpretive needs and computational efficiency.

References

- Abrudan, I. N., Pop, C. M., & Lazăr, P. S. (2020). Using a general ordered logit model to explain the influence of hotel facilities, general and sustainability-related, on customer ratings. *Sustainability*, 12(21).
- Agresti, A. (2010). *Analysis of Ordinal Categorical Data*. Wiley.
- Agresti, A. (2012). *Categorical data analysis*. (Vol. Vol. 792). John Wiley & Sons.
- Akaike, H. (1974). A new look at the statistical model identification. *IEEE transactions on automatic control*, 19(6), 716-723.
- Anderson, D. R., & Burnham, K. P. (2002). Avoiding pitfalls when using information-theoretic methods. *The Journal of wildlife management*, 912-918.
- Aydin, E. A., & Saracli, S. K. (2016). Analysis of households' electricity consumption with ordered logit models: example of Turkey. *International Journal of Humanities and Social Science Invention*, 5(6), 73-84.
- Azen, R., & Walker, C. M. (2021). *Categorical data analysis for the behavioral and social sciences*. Routledge.
- Babalola, S. J., & Mohd, S. (2021). Determinants of quality of housing units occupied by households in the public university host communities in Ondo state, Nigeria: an application of partially constrained/generalized ordered logit model. *Environment, Development and Sustainability*, 23(7), 9898-9926.
- Basu, B., Sebastian, M. P., & Kar, A. K. (2024). What affects the promoting intention of mobile banking services? Insights from mining consumer reviews. 77, 103695.
- Berger, J. H., Moe, W. W., Netzer, O., & Schweidel, D. A. (2020). Uniting the tribes: Using text for marketing insight. *Journal of marketing*, 84(1), 1-25.

- Cheng, H., Ng'ombe, J. N., & Lambert, D. M. (2024). A Bayesian generalized rank ordered logit model. *Journal of choice modelling*, 50.
- Chu, W., & Anderson, E. M. (1992). Capturing ordinal properties of categorical dependent variables: A review with application to modes of foreign entry. *International Journal of Research in Marketing*, 9 (2), 149-160.
- El-Adly, M. I. (2019). Modelling the relationship between hotel perceived value, customer satisfaction, and customer loyalty. *Journal of Retailing and Consumer Services*, 50, 322-332.
- Engler, T. H., Winter, P., & Schulz, M. (2015). Understanding online product ratings: A customer satisfaction model. *Journal of Retailing and Consumer Services*, 27, 113-120.
- Erkan, A., & Yildiz, Z. (2014). Parallel lines assumption in ordinal logistic regression and analysis approaches. *International Interdisciplinary Journal of Scientific Research*, 1(3), 8-23.
- Gangl, M. (2023). A generalized ordered logit model to accommodate multiple rating scales. *Sociological Methods & Research*.
- Garnefeld, I., Helm, S., & Grötschel, A. K. (2020). May we buy your love? Psychological effects of incentives on writing likelihood and valence of online product reviews. *Electronic Markets*, 30, 805-820.
- Garnefeld, I., Krah, T., Böhm, E., & Gremler, D. D. (2021). Online reviews generated through product testing: can more favorable reviews be enticed with free products? *Journal of the Academy of Marketing Science*, 49, 703-722.
- Gunasekar, S., & Sudhakar, S. (2019). Does hotel attributes impact customer satisfaction: A sentiment analysis of online reviews. *Journal of Global Scholars of Marketing Science*. 29(2), 180-195.
- Hastie, T. T. (2009). The elements of statistical learning: data mining, inference, and prediction . 2, 1-758.
- Hilbe, J. M. (2009). *Logistic Regression Models*.
- Hoskins, J., Gopinath, S., Verhaal, J. C., & Yazdani, E. (2021). The influence of the online community, professional critics, and location similarity on review ratings for niche and mainstream brands. 49, 1065.
- Hutto, C., & Gilbert, E. (2014). A parsimonious rule-based model for sentiment analysis of social media text. In *Proceedings of the international AAAI conference on web and social media*, 8(1), 216-225.
- James, G. W. (2013). *An introduction to statistical learning* (Vol. 112). New York: springer.
- Kübler, R., Pauwels, K., Yildirim, G., & Fandrich, T. (2018). App popularity: Where in the world are consumers most sensitive to price and user ratings? *Journal of Marketing*. 82(5), 20–44.
- Kaplan, S., & Prato, C. G. (2012). Risk factors associated with bus accident severity in the United States: A generalized ordered logit model. *Journal of safety research*, 43(3), 171-180.
- Kim, J., Naylor, G., Sivadas, E., & Sugumaran, V. (2016). The unrealized value of incentivized eWOM recommendations. *Marketing Letters*, 27(3), 411–421.
- Kohavi, R. (1995). *A study of cross-validation and bootstrap for accuracy estimation and model selection*. . Morgan Kaufman Publishing.
- Lee, H., & Cheon, H. (2018). Exploring Korean consumers' attitudes toward ethical consumption behavior in the light of affect and cognition. 30, 98-114.

- Liu, B. (2022). *Sentiment analysis and opinion mining*. Springer Nature.
- Liu, J., P., McFerran, B., & Haws, K. L. (2020). Mindful matching: Ordinal versus nominal attributes. (Vol. 57). *Journal of Marketing Research*.
- Liu, X. (2008, 05 12). Fitting Proportional Odds Models to Educational Data in Ordinal Logistic Regression Using Stata, SAS and SPSS. Retrieved from ERIC: <https://eric.ed.gov/?id=ED501264>
- Liu, X., & Koirala, H. (2012). Ordinal regression analysis: Using generalized ordinal logistic regression models to estimate educational data. *Journal of modern Applied Statistical methods*, 11, 242-254.
- Liu, X., Lee, D., & Srinivasan, K. (2019). Large-scale cross-category analysis of consumer review content on sales conversion leveraging deep learning. *Journal of Marketing Research*, 56 (6), 918-943.
- Long, J. S., & Freese, J. (2006). *Regression models for categorical dependent variables using Stata* (Vol. 7). Stata press.
- Luca, M. (2011). Reviews, reputation, and revenue: The case of Yelp.com. Harvard Business School NOM Unit Working Paper, 1–39.
- Magno, F., Cassia, F., & Bruni, A. (2018). Please write a (great) online review for my hotel! guests' reactions to solicited reviews. *Journal of Vacation Marketing*. 24(2), 148–158.
- Matzler, K., & Pechlaner, H. (2001). Guest satisfaction barometer and benchmarking: Experiences from Austria. *Journal of quality assurance in hospitality & tourism*, 2(3-4), 25-47.
- Mei, X., & Smith, P. (2020). A Comparison of In-Sample and Out-of-Sample Model Selection Approaches for ANN Streamflow Simulation. In *AGU Fall Meeting Abstracts*, 2020 , pp. H166-0002.
- Moe, W. W., & Trusov, M. (2011). The value of social dynamics in online product ratings forums. *Journal of marketing research*, 48(e), 444-456.
- Morgan, N. A., Anderson, E. W., & Mittal, V. (2005). Understanding firms' customer satisfaction information usage. *Journal of marketing*, 69(3), 131-151.
- O'Connell, A. A., & Amico, K. R. (2010). *Logistic regression. The reviewer's guide to quantitative methods in the social sciences*.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. . *Journal of marketing research*, 17(4), 460-469.
- Peng, L., Cui, G., Chung, Y., & Li, C. (2019). A multi-facet item response theory approach to improve customer satisfaction using online product ratings. *Journal of the Academy of Marketing Science*, 47, 960-976.
- Singh, J. (1991). Understanding the structure of consumers' satisfaction evaluations of service delivery. *Journal of the academy of marketing science*, 19, 223-244.
- Sridhar, S., & Srinivasan, R. (2012). Social influence effects in online product ratings. *Journal of Marketing*, 76(5), 70-88.
- Sunder, S., Kim, K. H., & Yorkston, E. A. (2019). What drives herding behavior in online ratings? The role of rater experience, product portfolio, and diverging opinions. . 83(6), 93-112.
- Tanguma, J., & Saldivar, R. (2014). Interpretation of logistic regression models in marketing journals. . In *The Sustainable Global Marketplace: Proceedings of the 2011 Academy of Marketing Science (AMS) Annual Conference*.

- Thao, T., & Shurong, T. (2020). Is it possible for electronic word-of-mouth and user-generated content to be used interchangeably. *Journal of Marketing and Consumer Research*, 65(41), 65-04.
- Tsamardinos, I., Greasidou, E., & Borboudakis, G. .. (2018). Bootstrapping the out-of-sample predictions for efficient and accurate cross-validation. *Machine learning*(107), 1895-1922.
- Van der Lans, R., Van Everdingen, Y., & Melnyk, V. (2016). What to stress, to whom and where? A cross-country investigation of the effects of perceived brand benefits on buying intentions. *International Journal of Research in Marketing*, 33(4), 924-943.
- Van Laer, T., Edson Escalas, J., Ludwig, S., & Van Den Hende, E. A. (2019). What happens in Vegas stays on TripAdvisor? A theory and technique to understand narrativity in consumer reviews. 46, 267-285.
- Williams, R. (2006). Generalized ordered logit/partial proportional odds models for ordinal dependent variables. *The stata journal*, 6(1), 58-82.
- Williams, R. (2016). Understanding and interpreting generalized ordered logit models. *The Journal of Mathematical Sociology*, 40(1), 7-20.
- Witvorapong, N., Ratisukpimol, W., & Watanapongvanich, S. (2019). Effectiveness of alcohol-prevention social marketing in the presence of alcohol advertising. *Journal of Social Marketing*, 9(3), 309-328.
- Yasmin, S., Eluru, N., Bhat, C. R., & Tay, R. (2014). A latent segmentation based generalized ordered logit model to examine factors influencing driver injury severity. *Analytic methods in accident research*, 23-38.
- Zhao, Y., Xu, X., & Wang, M. (2019). Predicting overall customer satisfaction: Big data evidence from hotel online textual reviews. *International journal of hospitality management*, 76, 111-121.

SESSION 33.3: BEYOND THE WEBCAM: ADAPTIVE SELLING THAT TRAVELS

Moderators:

Nicole Boylan

Full Paper

AI-Driven Construal Level Adaptation in B2B Sales Conversations: A Conceptual Framework.

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Technology is drastically reshaping our society once again. Some call it the Fourth Industrial Revolution, where Artificial Intelligence (AI) is driving dynamic innovation in sales industry. The industry is witnessing waves of new tactics to adapt to AI's capabilities. In B2B sector, AI assists in real-time during digitized sales conversations with buyers, analyzing buyers' current states and providing tailored recommendations through Machine Learning, Natural Language Processing (NLP), and other algorithms. However, there remains a lack of understanding in underlying psychological mechanisms through which AI-driven adaptive communication achieves its effects. Drawing on Construal Level Theory (CLT), this study proposes a conceptual framework of AI-Driven Adaptive Selling in B2B Sales Conversations. The framework outlines how AI-driven construal level adaptation influences sellers' message framing to increase perceived persuasiveness by enhancing buyers' cognitive fluency and reducing their psychological distance from the message. The study also examines how buyers' perceptions of the ethicality of using AI during sales conversations may affect persuasiveness. These insights aim to bridge theory and practice by guiding sales leaders in designing AI tools that align with buyers' cognitive processing.

INTRODUCTION

We are now entering a new “sales renaissance” as the world experiences a fourth industrial revolution due to the emergence of Machine Learning and Artificial Intelligence (AI; Syam & Sharma, 2018). Technology is rapidly transforming all business functions, and its impact on sales is becoming increasingly profound (Fehrenbach et al., 2025). Beyond mere automation of routine tasks, AI is evolving into sophisticated, adaptive tools designed to augment human capabilities and introduce unprecedented levels of efficiency and personalization (Rane et al., 2023). This shift is particularly salient within the business-to-business (B2B) sales environment, which is inherently dynamic and complex (Virtanen et al., 2015). B2B sales cycles are typically protracted, involve multiple stakeholders, and concern high-value transactions. Such complexity necessitates communication strategies that are highly nuanced and adaptive, capable of navigating diverse buyer needs, organizational structures, and decision-making processes (Chaker et al., 2025).

The inherent complexity of B2B sales creates a compelling strategic imperative for the integration of AI's adaptive capabilities. AI's core strength lies in its ability to process vast datasets and adapt dynamically, personalizing communication strategies based on buyer behavior and preferences (Rane et al., 2023). Therefore, AI-driven adaptive communication is not merely an incremental improvement; it represents a strategic advancement that directly addresses the core challenges of B2B sales complexity. By enabling highly tailored and responsive interactions, AI offers a pathway to significantly enhance communication effectiveness and, consequently, improve sales outcomes (Fehrenbach, et al., 2025). This suggests that the value proposition of AI in B2B sales is amplified by the domain's intrinsic difficulties. Yet, little is known about the underlying psychological mechanisms through which AI-driven adaptive communication achieves its effects.

To address this gap, the present research presents a conceptual framework for AI-driven construal level adaptation in B2B sales conversations. We posit that matching message construal to the buyer's construal level increases cognitive fluency, which in turn reduces psychological distance and enhances message persuasiveness. More importantly, we investigate how construal level adaptation is more effective in sales communications when performed by AI as compared to humans, and how perceived ethicality of AI usage moderates these effects on persuasion. Hence, our research contributes to the development of a theoretical framework that explains how AI-driven construal level adaptation diminishes psychological distance in B2B sales communication.

LITERATURE REVIEW

AI-Driven Sales Adaptation

Adaptive selling (AdaptS) is “the altering of sales behaviors during a customer interaction or across customer interactions based on perceived information about the nature of the selling situation” (Weitz et al., 1986, p. 175). It is one of the most influential and theoretically relevant concepts in the sales literature as it emphasizes interactions between sellers and buyers (Bush et al., 2001; Claro et al., 2024). Thus, it is argued that AdaptS requires a knowledge structure that recognizes different sales situations and implements sales approaches that are appropriate to each situation (Spiro & Weitz, 1990), which is crucial when multiple interactions are expected to occur.

Traditionally, salespeople often struggle to address the multifaceted challenges posed by long sales cycles and diverse decision-makers. AI’s core strength lies in its ability to process vast datasets and adapt dynamically, personalizing communication strategies based on buyer behavior and preferences (Kaptein et al., 2018). Utilizing Big Data, AI will gather and process buyer information that is collected from online behavioral data (e.g., browsing, purchase history, etc.), demographic or organizational data, and previous interaction data (e.g., previous calls; Kaptein et al., 2018, Rane et al., 2023). Then, via Machine Learning algorithms, AI analyzes customer behavioral patterns, preferences, and purchase intentions to generate lead, develop strategies, and even form messages for salespeople (Syam & Sharma, 2018).

More recently, Kaptein and colleagues (2018) proposed automated AdaptS as a method that generates sales messages tailored to customers. They demonstrated that the adaptive model achieved significantly higher success rates in closing deals compared to the static method (Kaptein et al., 2018). Building on this foundational work, we argue that AI’s capabilities extend beyond pre-sales analysis to supporting salespeople in real time during digitized interactions—a growing necessity in today’s B2B landscape. B2B sales cycles are protracted, thus involving multiple interactions and communications (e.g., Kaski et al., 2023). Many of these interactions between the seller and buyer have now become digitized so as to be more efficient and effective (Høgevold et al., 2025). Hence, these conversations take place on platforms such as Zoom, Google Meet, MS Teams, Facebook, and more (Rangarajan et al., 2021). To help salespeople adapt dynamically during these interactions, AI-powered sales assistants employ technologies such as Natural Language Processing to interpret buyer intent, sentiment, and engagement in real time (Gong.io, 2025; Salesken.ai, 2025).

These systems can detect conversational cues (e.g., objections, pricing concerns, changes in tone, etc.) and recommend tailored responses, next-best actions, and content suggestions (Salesken.ai, 2025; Akira.ai, 2024). Reinforcement Learning is also increasingly used to optimize these systems as AI agents continuously learn from sales outcomes to improve recommendations and message timing (Syam & Sharma, 2018; Gong.io, 2025). Some platforms even automate follow-up emails, CRM updates, and conversation summaries, enabling salespeople to focus more on relationship building and less on manual tasks. By integrating AI directly into digital sales interactions, these AdaptS tools adjust communication strategies in response to the evolving context of the conversation.

Construal Level Theory (CLT)

The main question that this study addresses is how the usage of real-time sales AI influences buyer’s perception of the seller’s message. The study proposes a conceptual framework based on Construal Level Theory (CLT). CLT provides a robust psychological foundation for understanding how individuals process information based on psychological distance. High-level construal is characterized by abstract, decontextualized representations that focus on the “why” and desirability of an event or object (Trope & Liberman, 2010). In contrast, low-level construal involves concrete, contextualized representations that emphasize the “how” and feasibility (Trope & Liberman, 2010). Psychological distance—the core antecedent of construal level—encompasses the four key dimensions of temporal, social, spatial, and hypothetical distance (Trope et al., 2007), each of which influences the level of abstraction at which information is processed.

First, temporal distance refers to a perceived time gap. People will be more likely to process information in an abstract manner when they have a longer amount of time to make a decision, but they will be more likely to process information in a concrete manner when there is a shorter amount of time to make a decision (Trope & Liberman, 2003). Second, social distance pertains to the perceived interpersonal connection between entities. Greater social distance leads people to think about others in more abstract and decontextualized terms, whereas greater social similarity encourages more concrete and contextualized thinking (Liviatan, Trope, & Liberman, 2008).

Third, spatial distance relates to physical proximity. People tend to think in more abstract and generalized ways as spatial distance increase, yet when things are physically closer they are thought of in more detailed and concrete terms (Trope et al. 2007). Fourth, hypothetical distance concerns the likelihood or certainty of an event. When an event seems less likely to occur people will think about it in more abstract terms, yet when they are more certain that the event will occur they will think about it more concretely (Trope & Liberman, 2010).

In sales, these psychological distances affect how buyers and sellers perceive value, build relationships, and make decisions (Liberman et al., 2007). Thus, according to the matching principle, aligning the construal level of a sales message with the buyer's psychological distance is critical for effective communication. When this alignment is lacking, it can lead to reduced comprehension, weakened persuasive impact, and even a loss of trust as the message may appear irrelevant, overly simplistic, or inappropriately complex (Trope & Liberman, 2010; White et al., 2011).

AI-Driven Construal Level Adaptation

Central to AI's adaptive communication is its reliance on advanced Natural Language Processing and Machine Learning algorithms (Syam & Sharma, 2018). These technologies allow AI to analyze real-time conversational data, including the speaker's tone, sentiment, specific keywords, and even infer the conversational flow and intent (e.g., Chowdhary, 2020). By detecting these subtle linguistic and paralinguistic cues, AI can infer the buyer's current psychological state, their preferred construal level, or their stage in the decision-making process (Adamopoulou & Moussiades, 2020; Gong.io, 2025). Based on this inference, the AI can then dynamically generate or recommend responses that align with the identified construal level. This capability allows for a seamless shift in communication style, content, and level of abstraction to optimize engagement and effectiveness.

In many contemporary B2B sales contexts, AI functions as a "co-pilot" rather than a fully autonomous agent (Gong.io, 2025). In this collaborative model, AI provides real-time insights, recommendations, and even suggested responses to human sales representatives, thereby augmenting their ability to adapt their communication. The model enhances human performance by providing immediate, data-driven guidance (e.g., Gong.io, 2025; Salesken.ai., 2025). This model enhances human performance by providing immediate, data-driven guidance. The "AI-driven" aspect of construal level adaptation can manifest through a dual pathway. It can involve AI directly engaging in adaptive communication with the buyer (e.g., through chatbots or virtual assistants; Adamopoulou & Moussiades, 2020; Van Doorn et al., 2017) or it can involve AI providing real time guidance and recommendations that empower a human sales representative to adapt their communications more effectively (Syam & Sharma, 2018; Gong.io, 2025). This distinction is important for research design, as the perceived source of adaptation (i.e., human vs. AI) could influence outcomes such as buyer trust and acceptance (Chatterjee et al., 2021; Van Doorn et al., 2017).

PROPOSED FRAMEWORK

Building on CLT and the matching principle, we propose that matching communication construal to the buyer's construal level increases the buyer's cognitive fluency of processing the sales message. Cognitive fluency is "the experienced ease/challenge of ongoing conceptual or perceptual cognitive processes" (Unkelbach, 2006, p. 339). It refers to the subjective ease with which the buyer processes and understands the information presented in the sales message (Wang, 2022). When the salesperson successfully matches the level of construal in the communication, the message becomes more congruent with the buyer's current cognitive state, leading to higher cognitive fluency. Similarly, Trzebiński, Lim, and Marciniak (2023) found that mismatches between argumentation type (i.e., abstract vs. concrete) and message design reduce persuasion for emerging technology products, highlighting the importance of aligning message framing with the cognitive process. Moreover, Lee and colleagues (2024) found that aligning the message frame with the consumer's construal level—using abstract messages for radically new products and concrete messages for incrementally new ones—enhances consumer evaluations by increasing message relevance and processing fluency. In contrast, mismatching decreases cognitive fluency (Trezebinski et al., 2023). Thus, we propose that:

P1: Matching communication construal to the B2B buyer's construal level during a sales conversation increases the buyer's cognitive fluency with the message.

As previously discussed, B2B sales interactions are complex, requiring multiple interactions and players, making it difficult for salespeople to recognize details and adapt fluently (e.g., Claro et al., 2024; Chaker et al., 2025). AI-driven sales adaptation enhances a salesperson's ability to recognize the buyer's construal level and adapt their strategies more effectively and efficiently in real time (Chowdhary, 2020; Adamopoulou & Moussiades, 2020; Van Doorn et al., 2017; Gong.io, 2025; Salesken.ai., 2025). Utilizing Machine Learning and Natural Language Processing, AI will provide recommendations to salespeople to aid in their communication strategy (Chowdhary, 2020; Gong.io, 2025; Salesken.ai., 2025). As such, AI will be more effective and efficient compared to human adaptation alone. Thus, we propose that:

P2: AI-driven sales adaptation will positively moderate the relationship between matching communication construal to B2B buyer's construal level and cognitive fluency, such that AI-driven (vs. human) construal sales adaptation will strengthen (attenuate) the positive relationship between matching communication construal level and cognitive fluency.

Importantly, increased fluency affects psychological distance. Fluently processed stimuli are perceived as closer to the self, whereas disfluent stimuli seem farther away (e.g., Oppenheimer, 2008; Troppe & Liberman, 2010). Alter and Oppenheimer (2008) demonstrated that participants who read text in an easy, legible font (i.e., high fluency) judged cities to be physically nearer than those who read the same text in a hard-to-read font (i.e., low fluency). In line with CLT, this reduction in perceived distance also leads to more concrete construals, whereas disfluent prompts caused people to describe a city in more abstract terms which reflect a sense of distance (Alter & Oppenheimer, 2008).

By the same token, when a buyer processes a sales message fluently, they are likely to feel the event, product, or decision is psychologically closer along multiple dimensions. Fluent processing signals familiarity, coherence, and credibility, all of which contribute to a perceptual sense of proximity. For instance, high cognitive fluency can reduce temporal distance by making future outcomes feel more immediate and actionable (Mrkva et al., 2018). A smoothly delivered message, particularly when it aligns with the buyer's construal, facilitates cognitive simulation of future use, creating the impression that benefits are "closer" in time and more easily attainable. Similarly, hypothetical distance is narrowed when fluency enhances message believability and certainty (Wang, 2022). If the buyer experiences low cognitive effort in understanding the value proposition, they tend to judge the outcome as more likely or inevitable, rather than speculative or uncertain. This sense of certainty enhances persuasive impact, especially for new or unfamiliar offerings.

Fluency also affects social distance by fostering a stronger interpersonal connection between the buyer and the message source. Messages that are easy to process are often attributed to competent, trustworthy communicators, and when the construal level is matched, it signals shared understanding or mutual perspective-taking (Lim et al., 2023; Connors et al., 2021). This can make a salesperson, or even an AI agent, seem more socially "close" and aligned with the buyer's goals, increasing perceived relational warmth and trust (Ahn et al., 2021). Lastly, spatial distance may be affected as fluent messages that vividly describe the product's relevance or applicability can prompt the buyer to visualize its use in their own physical or organizational environment (Kim et al., 2024). This effect is especially important in B2B contexts, where abstract descriptions of system-wide benefits may feel geographically or operationally remote, while concrete applications make the offering feel more immediately integrated within the buyer's space. Thus, we propose that:

P3: Increased cognitive fluency reduces perceptions of psychological distance.

Reduced perceptions of psychological distance make information seem more relevant and tangible, prompting more concrete thinking and detail-rich evaluation, which in turn increases liking, trust, and willingness to act (Oppenheimer, 2008; Sungur et al., 2016; Huang et al., 2023; Luan et al., 2024). Hence, reduced psychological distance generally enhances engagement and persuasion. This is consistent with findings that fluently processed messages carry higher credibility, and that reducing perceived distance (e.g., describing benefits in the near future) increases message impact. Thus, we propose that:

P4: Reduced psychological distance will increase the buyer's perceived persuasiveness of the message.

As AI becomes increasingly integrated into sales strategies, ethical concerns surrounding its use have gained greater prominence. Hartmann and colleagues (2024) emphasize that the ethicality of AI usage in sales is going to become a major topic in the literature as there are a considerable amount of studies providing support for AI's influence on buyer perceptions, attitudes, and behaviors. As AI takes on a more active role in shaping real-time communication and personalization, buyer perceptions of its ethical boundaries have become a critical concern.

While reduced psychological distance generally increases message persuasiveness by enhancing relevance, tangibility, and personal resonance, this relationship may not hold uniformly, especially when AI is perceived as the source of adaptation. Specifically, we propose that the perceived ethicality of AI moderates the link between reduced psychological distance and persuasiveness. When buyers perceive the AI-driven adaptation process as ethical, transparent, and respectful of their autonomy and privacy, the reduction in psychological distance has a greater impact on the persuasiveness of the message (Geise & Coleman, 2015). However, when AI is perceived as manipulative, intrusive, or opaque (e.g., through excessive personalization or surveillance of data usage), then the reduced distance may backfire and trigger psychological reactance, skepticism, or discomfort (Tarsney, 2025). In such cases, even messages that feel cognitively fluent and proximal may be interpreted as overly controlling or disingenuous, thereby undermining the goal of increasing persuasiveness. This aligns with recent research highlighting the importance of ethical perceptions in AI-driven communication and decision support (van der Goot et al., 2024; Zerilli et al., 2022). Thus, perceived AI ethicality acts as a boundary condition, amplifying or attenuating the persuasive power of psychological distance and fluently processed sales messages.

P5: The relationship between reduced psychological distance and the buyer's perceived persuasiveness of the sales message is moderated by the perceived ethicality of AI, such that the relationship is stronger [weaker] when perceived ethicality is high [low].

Building on this relationship, we theorize that psychological distance itself is shaped by upstream factors, specifically, how fluently the buyer processes the sales message. AI-driven sales adaptation increases the effectiveness of matching communication construal level. The enhancement of fluency from matching the communication's construal level reduces psychological distance of the buyer with regard to the message. As the psychological distance shrinks, the persuasive power of the message increases. Messages that feel closer are not only easier to evaluate but also more resonant, actionable, and personally relevant, particularly in B2B settings. Importantly, this suggests a sequential moderated-mediation process, where matching communication construal level improves fluency, which in turn reduces psychological distance, ultimately increasing perceived persuasiveness. This pathway highlights the importance of message design not only in terms of content but also in how well it aligns with the buyer's current cognitive orientation.

P6: The effect of matching the communication's construal level to the buyer's construal level on perceived persuasiveness is sequentially mediated by (a) increased cognitive fluency and (b) reduced psychological distance.

Figure 1 represents the theoretical framework proposed by this study.

DISCUSSION

This study advances theory by integrating CLT with emerging AI applications in B2B sales, offering a novel framework where AI systems act as dynamic agents of construal level adaptation. Unlike traditional models that assume adaptive communication is a human-only process, this framework highlights AI's capacity to analyze buyer cues and adjust messaging in real time, thus extending psychological distance research into the domain of intelligent technology.

By conceptualizing cognitive fluency and reduced psychological distance as sequential mediators, the framework enriches sales communication theory with a multi-level process perspective. This approach captures how AI adaptation improves message processing, relational alignment, and ultimately persuasion. The inclusion of perceived ethicality of AI as a moderator introduces a critical boundary condition that deepens the theoretical nuance of AI-driven construal level adaptation in B2B sales. While AI may effectively reduce psychological distance and enhance message persuasiveness through fluent and personalized communications, these benefits are contingent upon the buyer's trust in the ethical nature of AI involvement. When perceived ethicality is high, buyers are more likely to interpret AI-assisted interactions as helpful, credible, and aligned with their interests, thereby amplifying the persuasive impact of reduced psychological distance. In contrast, when ethical concerns arise—such as fears of manipulation, privacy violations, or opacity, these same AI-driven efforts may backfire and increase resistance or

skepticism. This insight challenges assumptions of AI's universal effectiveness and highlights the importance of ethical perceptions in shaping buyer responses to adaptive technologies in sales contexts.

Overall, the study offers a foundational theoretical contribution by integrating CLT, AI-driven adaptive communication, and B2B sales dynamics, thereby establishing a conceptual bridge between psychological distance and persuasive effectiveness in technologically mediated selling. By articulating how AI can be leveraged to match message construal to buyer cognition, and identifying key psychological and ethical mechanisms, this work sets the stage for future interdisciplinary research into adaptive, real-time communication strategies within digitized sales environments.

THEORETICAL & MANAGERIAL IMPLICATIONS

This study also offers critical insights for sales managers, AI system designers, and B2B organizations seeking to enhance the effectiveness of AI-driven sales adaptation. By grounding algorithmic decision-making in established psychological theories such as CLT and cognitive fluency, sales technologies can be optimized to not only automate communication, but also personalize it with greater psychological precision. Rather than relying solely on surface-level behavioral signals or historical data, AI systems can be trained to detect cues about a buyer's current psychological distance (e.g., abstract vs. concrete thinking, expressions of certainty, or linguistic distance) and adapt message framing accordingly.

For example, Natural Language Processing models can be improved to classify buyer language along dimensions of construal level and fluency, which in turn can inform adaptive communication strategies tailored to buyer cognition in real time. Machine Learning systems could also be trained using labeled datasets informed by psychological markers, allowing AI to refine its message framing through feedback loops tied to persuasive outcomes. This psychologically informed approach may increase engagement, reduce buyer resistance, and improve overall communication quality throughout the sales cycle.

Moreover, integrating perceptions of ethical AI usage as a moderating factor in algorithmic design encourages transparency and trust-building features, such as explainable AI outputs and customizable communication preferences, which may be especially important in complex or high-stakes B2B contexts. Ultimately, by embedding psychological principles into algorithmic logic, firms can move beyond generic personalization toward intelligent, context-aware, and ethically sensitive sales interactions, delivering a competitive advantage in an increasingly digitized and data-driven marketplace.

To fully capitalize on AI-driven adaptive sales strategies, managers should invest in training sales teams not only to operate AI tools, but to understand the psychological principles that underline adaptive communication. When human representatives comprehend how and why AI modifies message framing, they can more effectively interpret AI guidance and respond in real time to complex buyer cues. At the same time, maintaining buyer trust demands that organizations prioritize the ethical governance of AI systems. Transparency, user control, and explainability must be built into both the algorithms and user interfaces, particularly given growing concerns about the manipulation of buyer perceptions. Finally, AI systems should integrate continuous learning loops that go beyond surface-level performance metrics to include psychological indicators such as emotional tone, engagement signals, and buyer feedback. This approach allows AI to refine its adaptation over time, ensuring that communication remains both effective and respectful of buyer agency.

FUTURE RESEARCH

The study opens several promising avenues for future research to deepen our understanding of AI-driven adaptive communication in B2B sales contexts. First, empirical validation of the proposed conceptual model is essential. Future work should employ experimental designs or field studies to test the hypothesized causal pathways, especially the mediating role of cognitive fluency and psychological distance, as well as the moderating effect of perceived AI ethicality. Longitudinal research could also explore how AI adaptation influences relationship quality and sales outcomes over time.

Second, research could investigate additional moderators and boundary conditions beyond those proposed here. For instance, cultural differences in psychological distance preferences or AI acceptance may shape the

effectiveness of construal level adaptation. Similarly, buyer personality traits such as openness or skepticism toward technology may moderate responses to AI-driven sales communication.

Third, there is a need to explore technology design implications, particularly how advanced Machine Learning and Natural Language Processing algorithms can be optimized to detect nuanced buyer cues in real time. Future studies could examine the integration of multimodal data sources (e.g., voice tone, facial expressions, or biometric signals) to enhance AI's ability to infer buyer construal levels and psychological states.

Fourth, ethical considerations merit further attention. Future research should examine how transparency, explainability, and control features in AI systems affect buyer trust and long-term acceptance. Studies may also explore frameworks for responsible AI governance in sales, balancing personalization benefits with privacy and fairness concerns.

Finally, future research should expand the scope beyond B2B to include business-to-consumer (B2C) or hybrid sales environments which can offer insights into how AI-driven construal adaptation varies across different customer segments and sales contexts. Such comparative research could help generalize findings and refine adaptive communication strategies across industries. By addressing these areas, future research can advance both theory and practice at the intersection of AI, psychology, and sales management.

References

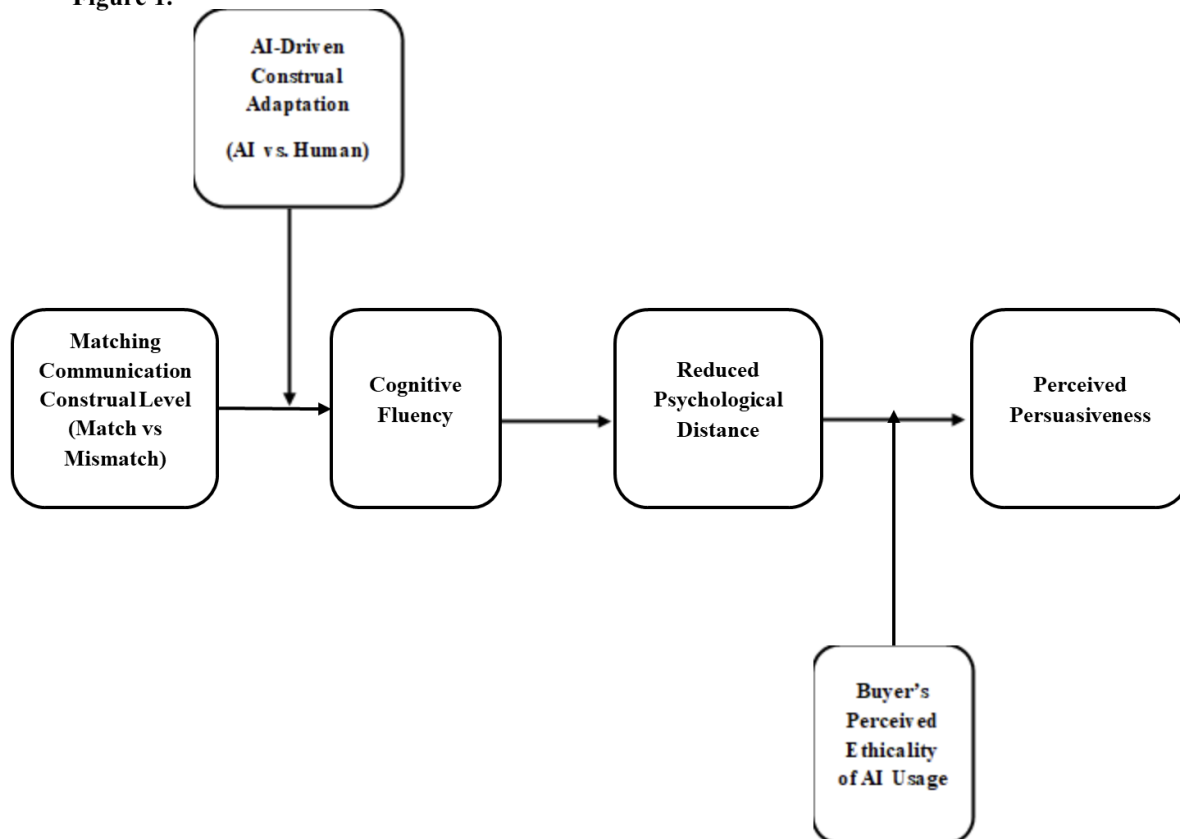
- Adamopoulou, E., & Moussiades, L. (2020, May). An overview of chatbot technology. In IFIP international conference on artificial intelligence applications and innovations (pp. 373-383). Cham: Springer International Publishing.
- Ahn, J., Kim, J., & Sung, Y. (2021). AI-powered recommendations: the roles of perceived similarity and psychological distance on persuasion. *International Journal of Advertising*, 40(8), 1366-1384.
- Akira.ai. (2024). Gong AI Agents. Akira.ai
- Alter, A. L., & Oppenheimer, D. M. (2008). Effects of fluency on psychological distance and mental construal (or why New York is a large city, but New York is a civilized jungle). *Psychological Science*, 19(2), 161-167.
- Chaker, N. N., Epler, R. T., Moreno, G., Amiri, D., McDougal, E. G., & O'Toole, J. (2025). The past, present, and future of adaptive selling: Toward an integrative framework. *Journal of the Academy of Marketing Science*, 1-28.
- Chowdhary, K. (2020). Natural language processing. *Fundamentals of artificial intelligence*, 603-649.
- Connors, S., Khamitov, M., Thomson, M., & Perkins, A. (2021). They're just not that into you: how to leverage existing consumer-brand relationships through social psychological distance. *Journal of Marketing*, 85(5), 92-108.
- Fehrenbach, D., Herrando, C., & Österle, B. (2025). Artificial intelligence applications in the B2B sales funnel. *Journal of Business-to-Business Marketing*, 1-24.
- Hartmann, N. N., Wieland, H., Gustafson, B., & Habel, J. (2024). Research on sales and ethics: Mapping the past and charting the future. *Journal of the Academy of Marketing Science*, 52(3), 653-671.
- Høgevoid, N., Rodriguez, R., Otero-Neira, C., & Svensson, G. (2025). The Role of Digital Communication Technologies Through Customer and Market Knowledge in B2B on Sales Performance and Satisfaction. *Journal of Business-to-Business Marketing*, 32(2), 165-185.
- Huang, H., Liu, S. Q., & Lu, Z. (2023). When and why language assertiveness affects online review persuasion. *Journal of Hospitality & Tourism Research*, 47(6), 988-1016.

- Geise, S., & Coleman, R. (2015). Ethical challenges of framing in persuasive communication, in words and pictures. In *Persuasion ethics today* (pp. 199-221). Routledge.
- Gong.io. (2025). Gong AI: advanced purposebuilt artificial intelligence for revenue teams. Gong.io
- Kaptein, M., McFarland, R., & Parvinen, P. (2018). Automated adaptive selling. *European Journal of Marketing*, 52(5/6), 1037-1059.
- Kaski, T., Niemi, J., & Pullins, E. (2018). Rapport building in authentic B2B sales interaction. *Industrial Marketing Management*, 69, 235-252.
- Lee, J., Chu, W., & Roy, R. (2024). Enhancing consumer evaluation of new products: The role of innovation newness and communication strategy. *Journal of Business Research*, 182, 114766.
- Lieberman, N., Trope, Y., & Wakslak, C. (2007). Construal level theory and consumer behavior. *Journal of consumer psychology*, 17(2), 113-117.
- Lim, R. E., & Lee, W. N. (2023). Communicating corporate social responsibility: How fit, specificity, and cognitive fluency drive consumer skepticism and response. *Corporate Social Responsibility and Environmental Management*, 30(2), 955-967.
- Liviatan, I., Trope, Y., & Liberman, N. (2008). Interpersonal similarity as a social distance dimension: Implications for perception of others' actions. *Journal of Experimental Social Psychology*, 44(5), 1256-1269.
- Luan, C. C., & Phan, T. A. (2024). The effect of emotion type and similarity of experience on consumers' willingness to pay for cause-related products: Construal level perspective. *Journal of Consumer Behaviour*, 23(2), 808-824.
- van der Goot, M. J., Koubayová, N., & van Reijmersdal, E. A. (2024). Understanding users' responses to disclosed vs. undisclosed customer service chatbots: a mixed methods study. *AI & SOCIETY*, 39(6), 2947-2960.
- Mrkva, K., Travers, M., & Van Boven, L. (2018). Simulational fluency reduces feelings of psychological distance. *Journal of Experimental Psychology: General*, 147(3), 354.
- Rane, N., Choudhary, S., & Rane, J. (2023). Education 4.0 and 5.0: Integrating artificial intelligence (AI) for personalized and adaptive learning.
- Rangarajan, D., Sharma, A., Lyngdoh, T., & Paesbrugghe, B. (2021). Business-to-business selling in the post-COVID-19 era: Developing an adaptive sales force. *Business Horizons*, 64(5), 647-658.
- Salesken.ai. (2025, July 15). AI sales assistant: boost revenue without hiring more reps. Salesken.ai
- Salesroom.com. (2024, August 29). Gong vs. Attention: which platform offers realtime sales assistance? Salesroom.com
- Sungur, H., Hartmann, T., & Van Koningsbruggen, G. M. (2016). Abstract mindsets increase believability of spatially distant online messages. *Frontiers in Psychology*, 7, 1056.
- Syam, N., & Sharma, A. (2018). Waiting for a sales renaissance in the fourth industrial revolution: Machine learning and artificial intelligence in sales research and practice. *Industrial marketing management*, 69, 135-146.
- Tarsney, C. (2025). Deception and manipulation in generative AI. *Philosophical Studies*, 1-23.
- Trzebinski, W., Lim, H., & Marciniak, B. (2023). The dis-matching effect: How argumentation type and message design influence persuasion for emerging technology products. *Journal of Business Research*, 168, 114207.
- Trope, Y., & Liberman, N. (2003). Temporal construal. *Psychological Review*, 110(3), 403-421.

- Trope, Y., Liberman, N., & Wakslak, C. (2007). Construal levels and psychological distance: Effects on representation, prediction, evaluation, and behavior. *Journal of Consumer Psychology*, 17(2), 83-95.
- Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological review*, 117(2), 440.
- Unkelbach, C. (2006). The learned interpretation of cognitive fluency. *Psychological Science*, 17(4), 339-345.
- Van Doorn, J., Mende, M., Noble, S. M., Hulland, J., Ostrom, A. L., Grewal, D., & Petersen, J. A. (2017). Domo arigato Mr. Roboto: Emergence of automated social presence in organizational frontlines and customers' service experiences. *Journal of service research*, 20(1), 43-58.
- Virtanen, T., Parvinen, P., & Rollins, M. (2015). Complexity of sales situation and sales lead performance: An empirical study in business-to-business company. *Industrial Marketing Management*, 45, 49-58.
- Wang, J. (2022). Consumer anxiety and assertive advertisement preference: the mediating effect of cognitive fluency. *Frontiers in Psychology*, 13, 880330.
- White, K., MacDonnell, R., & Dahl, D. W. (2011). It's the mind-set that matters: The role of construal level and message framing in influencing consumer efficacy and conservation behaviors. *Journal of Marketing Research*, 48(3), 472-485.
- Zerilli, J., Bhatt, U., & Weller, A. (2022). How transparency modulates trust in artificial intelligence. *Patterns*, 3(4).

APPENDIX

Figure 1.



SESSION 33.4: FROM FEEDS TO FEES: STRATEGY THAT LIFTS WILLINGNESS TO PAY

Moderators:

Khalandar Badrulla Kammur

Summary Brief

Factors Effecting Sustainable Luxury Consumption

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The luxury industry's shift toward sustainability responds to changing consumer expectations and environmental worries. This study explores the relationship between public self-consciousness and growth mindset and examines the role of anticipated consumption pride in sustainable luxury purchase decisions. Public self-consciousness prompts consumers to consider social perceptions, motivating them to make purchases that boost their image as ethical consumers and generate anticipated consumption pride. Additionally, for individuals with a high growth mindset, public self-consciousness results in greater intentions to buy sustainable luxury products. The findings have important implications for both theory and sustainable luxury.

Introduction

Sustainability is increasingly central to the luxury industry, with the personal luxury goods market reaching €362 billion in 2023 (Bain & Company, 2024). Luxury brands like Stella McCartney and Edun adopt eco-conscious practices, emphasizing ethical sourcing and transparency (Septianto et al., 2021). This shift toward sustainable luxury balances exclusivity with environmental and social responsibility (Joy et al., 2012). However, tensions arise as the indulgent image of luxury conflicts with the ethical focus of sustainability, leading to consumer skepticism (Kapferer, 2014). Psychological drivers like public self-consciousness and growth mindset influence sustainable luxury consumption. Public self-consciousness drives choices to enhance social image, while a growth mindset encourages sustainable purchases for personal development. Anticipated consumption pride further motivates ethical choices. This study explores how public self-consciousness shapes purchase intentions, moderated by growth mindset, and the role of anticipated pride in sustainable luxury dining.

Method and Data

Data were collected via an online Qualtrics survey from a university subject pool in the Southwest United States. Of 288 responses, 269 were usable after excluding incomplete or patterned responses ($n=269$; 53.5% female; mean age=22 years; $SD=3.04$ years). The survey included 19 questions measuring public self-consciousness (Burnkrant & Page Jr, 1984; $\alpha=.83$), growth mindset (Sigmundsson & Haga, 2024; $\alpha=.84$), anticipated consumption pride (de Lima et al., 2019; $\alpha=.91$), and purchase intentions (Spears & Singh, 2004; $\alpha=.91$). Knowledge of sustainable luxury products (Bloch, 1989; $\alpha=.82$) and demographics (age, gender) were control variables. All items used validated seven-point Likert or bipolar scales. Internal consistency was assessed with Cronbach's alpha (Nunnally, 1978). Hypotheses were tested using PROCESS macros (Hayes, 2017).

Summary of Findings

Linear regression supported H1, showing public self-consciousness positively affects purchase intentions for sustainable luxury products ($R^2=.2$, $\beta=.25$, $SE=.05$, $p<.001$). PROCESS Model 1 confirmed H2, revealing a significant interaction between public self-consciousness and growth mindset on purchase intentions (effect=.12, $SE=.43$, 95% CI: .03 to .20, $p<.001$). High public self-consciousness with a high growth mindset led to stronger purchase intentions ($M=5.05$ vs. 3.53, $p<.05$), while low public self-consciousness showed no significant effect regardless of mindset ($M=3.97$ vs. 4.29, $p>.1$). PROCESS Model 8 (Hayes, 2018) with 5000 bootstrapped samples showed no direct effect of public self-consciousness on anticipated consumption pride (effect=-.21, $SE=.16$, $p=.20$), but a marginally significant interaction with growth mindset (effect=.07, $SE=.04$, $p=.05$). The conditional indirect effect through anticipated consumption pride was significant at high growth mindset levels (effect=.19, $SE=.07$, 95% CI: .06 to .33), impacting purchase intentions (effect=.60, $SE=.05$, $p<.001$). These results support H3, confirming moderated mediation.

Key Contributions

This study advances sustainable consumption research by demonstrating that public self-consciousness drives purchase intentions for sustainable luxury products, particularly when moderated by a high growth mindset. Anticipated consumption pride mediates this relationship, emphasizing the role of psychological motivators in luxury dining. The findings enrich consumer behavior frameworks by linking self-perception, mindset, and ethical consumption. Practically, luxury brands can target campaigns to appeal to consumers' social image and growth-

oriented values, promoting sustainable practices to attract environmentally conscious consumers and support broader sustainability goals in the hospitality sector.

References are available upon request.

Summary Brief

Blending Physical and Digital: How Brand Strategy Shapes Consumer Willingness to Pay in the Metaverse

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Fashion brands are rapidly entering the Metaverse, where users engage in virtual shopping through avatars. This research investigates how different brand strategies - digital-only versus physical-first (phygital)—influence consumers' perceived emotional value and their willingness to pay for digital fashion items. Drawing on five experimental studies with Metaverse users, we find that emotional value plays a central role in motivating spending in virtual environments.

Introduction

The Metaverse offers a novel shopping context where consumers use avatars to express identity through digital fashion. While digital-native brands (e.g., DressX, Fabricant) offer only virtual goods, physical-first brands (e.g., Nike, Zara) blend virtual and real-world experiences, offering both digital and physical products. Prior conceptual work has highlighted the Metaverse's potential (Giang Barrera & Shah, 2023a), but empirical research remains scarce. This research addresses that gap.

Conceptual Background

Building on the Theory of Consumption Values (Sheth et al., 1991; Sweeney & Soutar, 2001), we propose that emotional value derived from brand engagement is a key driver of willingness to pay for virtual fashion. Emotional value is likely heightened when brands offer a phygital experience—bridging avatars and real-life identity (Belk, 2013; Barnes et al., 2015). We also examine the moderating role of consumers' Metaverse shopping knowledge.

Data and Results

Five studies with Metaverse users (total $N > 800$) examined how brand strategy (digital-only vs. physical-first) affects willingness to pay for digital items. Across studies, participants consistently reported higher willingness to pay for physical-first brands. In a within-subject study, participants allocated significantly more of their budget to physical-first brands ($M = 69.8$) than digital-only brands ($M = 30.2$), $F(1,99) = 53.6$, $p < .001$.

Follow-up studies showed that physical-first brands also generated significantly higher emotional value (e.g., $F(1,107) = 8.6$, $p = .005$). Mediation analysis confirmed emotional value as a key mechanism, with a significant indirect effect ($B = 5.67$, 95% CI [0.58, 11.31]). Moreover, shopping knowledge moderated this effect—only users with high shopping expertise showed increased willingness to pay, supporting a moderated mediation model (index = 2.23, 95% CI [0.06, 5.02]). These results suggest that emotional value is a key driver of digital spending in the Metaverse, especially for experienced shoppers engaging with phygital brands.

Discussion

This research reveals that phygital brand strategies in the Metaverse foster stronger emotional bonds and increase willingness to pay, especially among knowledgeable consumers. By offering both digital and physical items, brands can enhance avatar-self congruence and tap into identity-related value perceptions. This work contributes to the literature on digital branding, consumer behavior in virtual economies, and Metaverse marketing strategy.

Implications

Marketers seeking to establish a foothold in the Metaverse should emphasize phygital integration, allowing consumers to buy both digital and physical versions of products. Segmentation strategies should target experienced shoppers, as these consumers perceive greater emotional value and are more willing to pay. Emotional branding, not just utility or social value, is key in driving digital purchases in virtual spaces.

Limitations and Future Research

A limitation of this research is its reliance on hypothetical purchase scenarios, rather than actual Metaverse-based transactions. While participants were recruited as Metaverse users, they were not observed inside Metaverse platforms during decision-making. Also, the willingness to pay was self-reported, which may differ from behavioral data. Future studies should use field experiments inside actual Metaverse platforms (e.g., Decentraland, Roblox) to observe real-time purchasing behavior. Researchers can also explore how avatar identity, brand category (e.g., luxury vs. fast fashion), or event context (concerts, festivals) influence perceived value. Collaborating with real brands could also enhance ecological validity and offer industry insights.

References

- Barnes, Stephen J., Jan Mattsson, and Niklas Hartley (2015), "Assessing the value of real-life brands in virtual worlds," *Technological Forecasting and Social Change*, 92, 12–24.
- Belk, Russell W. (2013), "Extended self in a digital world," *Journal of Consumer Research*, 40 (3), 477–500.
- Giang Barrera, Kristina, and Dhruv Shah (2023), "Marketing in the Metaverse: Conceptual understanding, framework, and research agenda," *Journal of Business Research*, 155, 113420.
- Sheth, Jagdish N., Bruce I. Newman, and Barbara L. Gross (1991), "Why we buy what we buy: A theory of consumption values," *Journal of Business Research*, 22 (2), 159–170.
- Sweeney, Jillian C., and Geoffrey N. Soutar (2001), "Consumer perceived value: The development of a multiple item scale," *Journal of Retailing*, 77 (2), 203–220.

SESSION 33.5: WHO WE TRUST AND WHY IT WORKS

Full Paper

Exploring how seller name cues and image realism influence trade decision-making in consumer-to-consumer online exchanges

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Consumer-to-consumer (C2C) exchanges face information asymmetries and uncertainty between individuals who are unfamiliar with each other. Drawing on signaling theory and cue-diagnostics theory, this research examines how name cues and image realism affect consumer information confidence and trade intentions. Across four studies employing a mixed methods approach, we combine real-world online behavioral data scraped from a trading website (Studies 1 & 4) with controlled experiments (Studies 2 & 3) to test our hypotheses. Results demonstrate that image realism moderates the effect of name cues on perceived information confidence. When seller image realism is low, real and competent name cues significantly enhance information confidence. Moreover, the mediation effect of perceived information confidence on the relationship between name cues and trade intent is significant only when image realism is low. These findings advance understanding of compensatory signaling mechanisms and provide insights for C2C platform design and user engagement.

Keywords: C2C exchange, cue-diagnostics, signaling theory, warmth, competence, name cue

SESSION 33.6: ACCESS & BELONGINGS ACROSS THE JOURNEY

Moderators:

Jutong Wen

Full Paper

When Excellence Intimidates: Fixed Beliefs, Effort Attribution, and Learning Engagement in Frontline Employee Training

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The purpose of this research is to examine frontline employee learning engagement through an implicit-beliefs (mindset) lens. The authors inject a social-comparison situational perspective to explain why exposure to expert trainers can either inspire or intimidate novice FLEs. Building on this vantage point, the authors advance four hypotheses that specify how and why early FLE learning effort varies. Perceived trainer expertise, effort attribution (effort vs. talent), expected personal success, learning effort, implicit beliefs about ability (fixed vs. incremental), and domain self-efficacy are central to the framework. The model proposes that, relative to growth-minded peers, fixed-belief trainees are more likely to read excellence as innate, thereby lowering effort attribution, depressing success expectations, and curtailing learning effort. The implications apply to sales and service roles in which novices must acquire complex, tacit skills. The authors offer several implications for managers to enhance sustained engagement from FLEs who experience these challenges.

Introduction

Frontline employees (FLEs) in sales and service function as organizations' important human touchpoints in customer encounters and are critical representatives of organizations (Cron et al., 2014; Evans et al., 1999; Gillison et al., 2023; Hunter & Perreault, 2007; Northington et al., 2021). In the United States, roughly 100 million workers occupy FLE roles, representing about 70% of the national workforce (Bankert et al., 2024). The wellbeing of frontline workers, in turn, shapes customer experience and organizational outcomes (Gill, 2025). Engaged and satisfied FLEs tend to perform more effectively and exhibit lower turnover (Harter et al., 2002; Griffeth et al., 2000). Yet an estimated 77% of the global workforce reports feeling disengaged at work (Gallup, Inc., 2024).

To combat these challenges, FLEs need to cultivate adaptability by embracing ambiguity and continuously acquiring new skills (Brassey, De Smet & Maor, 2024). That is, FLEs must learn how to learn. Many firms grant FLEs considerable discretion in customer interactions, with such empowerment affording latitude in role execution (Pedersen, 2021). This, in turn, demands substantial tacit learning. Consequently, organizations must clarify how best to motivate FLEs to invest in selfdevelopment and ongoing learning. Embracing ambiguity and engaging in learning require sustained effort to build rolerelevant knowledge and skills. However, contemporary culture often values innate "talent" over visible effort (Bak & Yi, 2025), making it essential to understand how these beliefs influence FLE development and performance.

Decades of research on performance across a multitude of domains indicate that behavior in learning contexts is organized by implicit beliefs about the malleability of ability (Dweck, 1986), namely incremental beliefs (or a growth mindset) and entity beliefs (or a fixed mindset/belief). Although these terms are synonymous and widely interchangeable, we employ the terms "incremental beliefs" and "fixed beliefs" throughout this work for consistency due to their wide use. Incremental beliefs are associated with superior outcomes in workplace settings, while fixed beliefs often yield negative outcomes (Burnette et al., 2013; Kray & Haselhuhn, 2007). Implicit beliefs can shift in response to convincing information or deliberate reframing, and be induced experimentally (Paunesku et al., 2015; Yeager et al., 2019). However, people tend to default to a dominant belief pattern, with approximately 40% of adults endorsing incremental beliefs, 40% endorsing fixed beliefs, and 20% do not consistently endorse either (Dweck, 1999; Kray & Haselhuhn, 2007). Although a growth mindset is lauded and pursued for its beneficial outcomes, the fact that a large portion of the population holds the more problematic fixed beliefs is an important and overlooked state of affairs.

In this study, we investigate how a fixed mindset shapes trainee FLEs' early expectations of success. Our guiding research question is: How do FLEs' implicit beliefs about ability influence the effort that new FLEs invest in

acquiring the knowledge and skills required for effectiveness? Specifically, we examine the mechanism through which fixed mindsets alter anticipated personal success and foster counterproductive behaviors. Relative to their growthminded counterparts, we propose that, when trainees observe trainer expertise, fixedmindset FLEs are more likely to regard trainers' high performance as unattainable. Consequently, they experience lower expectations about their own likelihood of success due to upward comparison with the trainer. Although upward social comparisons can be motivating, in training contexts, we propose exposure to expert performance can elicit helplessness among those who endorse fixed beliefs.

This work contributes in three ways. First, we connect social comparison processes with implicit beliefs about skill and ability to explain trainees' willingness to learn and develop rolerelevant competencies. Second, we explain how a helplessness response can emerge via exposure to high performers in training settings when cumulative effort is overlooked. Third, we formalize how success expectations are formed through proxy comparison to high-achieving exemplars and how using others' exceptional performance as a proxy for one's own potential can be misleading for fixedbelief individuals. Put simply, fixedbelief FLEs may underestimate their potential by attributing others' success to innate ability and discounting the role that sustained effort played in their expertise.

We offer particular relevance to the personal selling and services literatures by clarifying how socialsituational factors shape FLE judgment and decision making and, ultimately, performance. Importantly, our analysis suggests reducing perceived threat as a more effective lever for improving outcomes compared to merely increasing motivation or incentives. The next section reviews work related to the effectiveness of frontline employees. We then examine the origins of implicit beliefs and their influence in FLE roles, specifically connecting FLEs' beliefs about skill and ability to how they perceive high performers in training settings. Following that, we introduce our conceptual development, which draws from social comparison theory to formulate four working hypotheses and a conceptual model. We finish this work with theoretical and managerial implications, and opportunities for future research.

Literature Review

Drivers of Frontline Employee Effectiveness

The effectiveness of FLEs has been a longstanding concern in marketing. Early work emphasized dispositional traits of good sellers (e.g., Canfield, 1961; Greenberg & Mayer, 1964). Over time, the field shifted toward contextual and psychological explanations, including organizational support, managerial practices, and FLEs' own psychological empowerment (Coelho et al., 2011; Iqbal et al., 2024; Ogilvie et al., 2017; Yoo et al., 2014).

At the individual level, FLE outcomes have been shown to depend on motivation, capabilities, and selfregulation. Evidence highlights effective coping during task control and recovery (Singh, 2000), prosocial motivation that orients effort toward customer welfare (Iqbal et al., 2024), customer orientation and relational skills (Saxe & Weitz, 1982; Stock & Hoyer, 2005), and learningrelevant beliefs and expectancies. At the organizational level, leadership and job design shape a context in which FLEs can thrive or struggle. Key levers include aligning job resources (e.g., autonomy, coaching, training, tools) with job demands (e.g., workload, time pressure, emotional labor) (Yoo et al., 2014), minimizing role stressors, notably role conflict and role ambiguity, which can erode service quality and sales outcomes (Coelho et al., 2011; Gabler et al., 2017), and fostering a positive service climate and psychologically safe learning environment that legitimize helpseeking and feedback (Schneider, White, & Paul, 1998). Empowerment policies that grant discretion can elevate performance when paired with adequate training and guidance; however, in the absence of those supports, empowerment can raise ambiguity and risk (Ahearne et al., 2005). Thus, high autonomy benefits those with sufficient skill and guidance but can overwhelm novices who lack clear performance scripts (Bell & Kozlowski, 2008).

Misaligned job demands and resources, unclear roles, or insufficient training leave FLEs vulnerable to burnout, disengagement, and turnover, which harm employees, customers, and firms (Riedel, 2023). For instance, commitment to service quality and sales performance weakens under role conflict (Gabler et al., 2017). These risks are pronounced in training and earlytenure contexts, where much of the role's tacit knowledge is learned informally through observation and practice rather than from complete procedures. In such settings, vicarious learning and upward comparison to trainers and high performers are unavoidable. Whether these comparisons inspire or threaten depends, in part, on trainees' implicit beliefs about ability.

We situate our study within the goalorientation tradition, while focusing on implicit beliefs as a foundational lens through which trainees interpret expert performance. Specifically, we propose that fixed beliefs bias interpretations of trainer excellence as unattainable, which we propose dampens expected personal success, learning motivation, and subsequent effort. Conversely, incremental beliefs render the same exposure useful and motivating, thereby enhancing learning behaviors. This mechanism provides a person–situation account of how training environments can inadvertently generate counterproductive responses among a subset of FLEs, even in supportive organizations.

The next section reviews the origins of incremental versus fixed beliefs about the malleability of skills and intelligence. We then examine how these beliefs have been examined in marketing and FLE research, and integrate social comparison processes to develop our conceptual model and hypotheses.

Drivers of Frontline Employee Effectiveness

Foundational work on goal orientation and implicit theories showed that learners exhibit distinct patterns of response when they face tasks beyond their current capabilities (Dweck, 1986; Dweck & Leggett, 1988). Some persist and treat difficulty as informative, whereas others display helplessness and withdraw effort. These differences are organized by implicit beliefs about ability. Individuals endorsing incremental beliefs (growth mindset) assume that intelligence and ability can be developed through effective strategies, practice, and feedback. In applied settings such as FLE training, incremental beliefs imply that low current proficiency is temporary and improvable with effort and learning opportunities. In contrast, individuals endorsing fixed beliefs (i.e., fixed mindset or entity beliefs) assume that intelligence and ability are relatively fixed; they interpret difficulty as evidence of low ability and view effort as diagnostic of deficiency rather than as a route to mastery (Dweck & Leggett, 1988; Mueller & Dweck, 1998).

Incremental and fixed beliefs function as part of a broader meaning system (Kelly, 1955) that shapes appraisals, goals, and selfregulation (Molden & Dweck, 2006). Incremental beliefs promote a willingness to seek diagnostic feedback, a preference for challenging tasks, and are associated with persistence after setbacks and adaptive updating of strategies (Blackwell, Trzesniewski, & Dweck, 2007; Burnette et al., 2013; Anseel et al., 2015; Nussbaum & Dweck, 2008). Fixed beliefs, by contrast, are linked to avoidance of challenge, reduced feedback seeking, and faster disengagement after failure (Dweck & Leggett, 1988; Mueller & Dweck, 1998). Incremental beliefs should support deliberate practice and vicarious learning from exemplars, whereas fixed beliefs can convert the same exposure into threat and helplessness (Bandura, 1977). These dynamics map directly onto earlytenure FLE contexts, where much knowledge is tacit and learning is inherently errorprone.

Incremental and Fixed Beliefs in Marketing and the FLE Context

Most marketing scholarship on mindsets comes from the consumer side, where incremental and fixed beliefs influence branding, persuasion, and product evaluations (Mathur, Chun & Maheswaran, 2016; Murphy & Dweck, 2016; Jain et al., 2021). For example, consumers endorsing fixed beliefs are more likely to adopt and express brand-congruent identities (e.g., feeling more sophisticated after using a luxury brand), while those endorsing incremental beliefs are less susceptible to such image transfer (Park & John, 2010). Using brands that signal competence can boost self-efficacy and performance, particularly for those with a fixed belief (Park & John, 2012). Customer mindsets have also been shown to moderate response to message framing, with fixed-oriented customers responding better to status or image cues, whereas incremental-oriented customers respond better to learning- and improvement-focused appeals (Jain et al., 2021; Murphy & Dweck, 2016).

Evidence relevant to frontline work is consistent with this pattern. Salespeople high in learning orientation (which derive from incremental beliefs) adapt more effectively to organizational change (Ahearne et al., 2010). Incremental beliefs also predict learning engagement after failure, a frequent feature of early-tenure customer interactions (Sik, Cummins, & Job, 2024), and correlate with employee engagement and proactivity at work (Keating & Heslin, 2015). Conversely, fixed beliefs are associated with indicators of strain and burnout (Kim, 2023). Research assessing if salespeople view selling skill as “born” (fixed) or “made” (incremental) shows that fixed beliefs track an unfavorable pattern of sales outcomes (Novell, Machleit, & Sojka, 2016). Even where mindsets are not measured directly, adjacent sales constructs align with the same logic. Adaptive selling is a robust driver of performance and is

facilitated by learning orientation (Spiro & Weitz, 1990; Sujon, Weitz, & Kumar, 1994). In negotiations, a close analog to many B2B exchanges, incremental beliefs about negotiation ability predict better preparation, greater strategy adaptation, persistence after setbacks, and improved outcomes over time (Kray & Haselhuhn, 2007).

Taken together, prior work suggests that incremental beliefs support adaptive selling, experimentation, and strategy revision, which are the behaviors that underlie performance in FLE roles. In contrast, fixed beliefs raise the perceived cost of effort, increase sensitivity to social evaluation, and heighten the risk of withdrawal when difficulty is salient. Despite these advances, most work emphasizes the advantages of incremental beliefs rather than unpacking how fixed beliefs generate suboptimal results in sales and service contexts. We advance this literature by theorizing a training-stage mechanism: when novice FLEs with fixed beliefs observe expert performance, they are more likely to treat excellence as unattainable, lowering expected personal success, reducing learning motivation, and curtailing effort. The next section develops this mechanism by integrating social comparison during training with implicit beliefs about ability.

Conceptual Development and Hypotheses

Social Comparison Theory

Social comparison theory holds that people evaluate their standing by comparing themselves to others, especially when objective metrics are sparse (Festinger, 1954). Early in their tenure, frontline trainees lack rich personal performance histories, face ambiguous standards, and observe others performing the same tasks, especially expert trainers. In such conditions, people routinely evaluate themselves relatively rather than absolutely by comparing themselves to others (Wheeler, Martin & Suls, 1997). Social comparison theory proposes that individuals appraise their abilities and prospects by referencing others when objective yardsticks are absent or hard to define (Festinger, 1954).

Comparison effects depend on who is chosen as the standard and how the comparison is construed (Collins, 1996; Wood, 1989). Comparisons can be upward (to those doing better) or downward (to those doing worse). Upward comparisons often provide information for improvement but can threaten the self if the gap feels large or unbridgeable. In contrast, downward comparisons can protect mood but offer little learning value and may dampen effort (Wills, 1981; Buunk & Gibbons, 2007). When direct self-comparison is impossible, people make ability evaluations by proxy, meaning they identify a similar other on some baseline and then import that person's outcome on a new task to forecast their own (Wheeler, Martin, & Suls, 1997; Martin, Suls, & Wheeler, 2002). If maximal effort is perceived, the observed performance acts like a clean ruler for ability. If effort is uncertain or low, observers discount the score's diagnostic value and turn to substitute cues (e.g., training history, experience, demographics).

This effort invisibility invites the inference that excellence reflects inherent ability unless observers have a countervailing belief system or are provided cues to the contrary. We propose that mindsets supply the meaning system that filters comparison information. Incremental beliefs assume effort and make expert performance appear attainable with practice. Fixed beliefs assume effort as diagnostically threatening ("needing effort signals low ability") and heighten sensitivity to status gaps. This in turn, makes the same expert performance look innate and thus less relevant to one's own trajectory (Dweck, 1986; Dweck & Leggett, 1988; Mueller & Dweck, 1998). In short, mindsets determine whether upward comparison yields instruction or intimidation.

In training, upward comparisons dominate, as novices mostly watch exemplars. Expert demonstrations are informative but also ambiguous. Observers rarely see the cumulative practice, failed attempts, and coaching behind polished performance. Whether this exposure inspires assimilation ("I can become like that") or triggers contrast ("That level is out of reach") hinges on perceived similarity/attainability, control (whether effort can realistically close the gap), and the diagnosticity of what is observed (Collins, 1996). These conditions mean that the same upward target can either function as a motivating model (assimilation) or as a threat cue (contrast), depending on what the trainee infers about how the performance was achieved.

We propose that trainees with stronger fixed beliefs are more likely to discount the trainer's cumulative effort, infer innate talent, and therefore lower their expectations about their own likelihood of success. Trainees with stronger incremental beliefs make the opposite inference. They see expertise as the product of effort, which sustains or elevates their expected success and motivates learning investment. We therefore expect implicit beliefs to moderate how perceived trainer expertise is translated into effort attribution. When the trainer appears highly expert, fixed-oriented

trainees should discount effort and overascribe performance to fixed talent; incremental-oriented trainees should credit effort and view the same performance as attainable through learning. This leads to hypothesis 1.

Hypothesis 1: The relationship between perceived trainer expertise and trainees' effort attribution is moderated by implicit beliefs about ability.

Stated another way, when perceived trainer expertise is high (vs. moderate), trainees higher in fixed beliefs will attribute the trainer's performance less to effort (lower EA) and more to innate ability, whereas trainees higher in incremental (growth) beliefs will attribute the trainer's performance more to effort (higher EA).

We define Effort Attribution (EA) as the extent to which a trainee explains a trainer's performance by sustained effort and learning (high EA) versus innate talent (low EA). EA matters because it shapes attainability judgments. If expertise is effort-based, then the path to comparable performance seems open. If expertise is talent-based, the path seems closed.

Within expectancy-value frameworks, expectations of success are immediate determinants of effort allocation (Hastie, 2001). Thus, in training, higher expected success should predict greater learning effort, such as time on task, persistence after errors, proactive feedback seeking, and other behaviors linked to adaptive performance in sales and service (Anseel et al., 2015; Sujon, Weitz, & Kumar, 1994). Accordingly, the effect of expert exposure on learning effort should run through expected personal success. This leads to hypotheses 2 and 3.

Hypothesis 2: Effort attribution positively predicts expected personal success in the FLE role.

Hypothesis 3: Expected own success will be positively associated with learning effort.

Stated another way, trainees who attribute trainer excellence to effort (higher EA) compared to ability (lower EA) will report a higher/lower subjective probability of achieving comparable performance. In turn, this will lead trainees to engage in more learning effort, such as persistence, feedback seeking, and strategy revision.

Trainees with higher domain self-efficacy possess a stronger sense that they can execute role-relevant tasks (Bandura, 1977). Self-efficacy should buffer the negative implications of low EA (e.g., when a trainee attributes trainer excellence to talent): confident trainees can still believe "I can get there," preserving expected success. This leads to hypothesis 4.

Hypothesis 1: Domain self-efficacy attenuates the negative effect of low effort attribution on expected personal success.

Stated another way, the positive association between EA and expected success will be weaker when domain self-efficacy is high, thereby mitigating the downstream reduction in learning effort.

The relationships expressed in the hypotheses are depicted in Figure 1 below. Definitions of the constructs depicted in the figure are in Table 1 in the Appendix.

In sum, we propose that novice FLEs commonly infer their own potential from expert demonstrations, but what they see when they look at an expert depends on what they believe about ability. Fixed beliefs bias trainees toward talent attributions that depress expected success and curtail learning effort, while incremental beliefs support effort attributions that sustain expected success and investment. By locating effort attribution as the core mechanism and specifying implicit beliefs and self-efficacy as key contingencies, the model explains how training environments that showcase excellence can inadvertently generate helplessness in a subset of FLEs.

Figure 1: Conceptual Model

General Discussion and Implications

This conceptual development and hypotheses show that FLEs' implicit beliefs can be either a catalyst for learning or a source of helplessness. Because novices lack a personal performance history, they forecast their prospective success in the FLE role by-proxy from expert trainers. Our model formalizes this by showing how

perceived trainer expertise shapes trainee effort attribution, namely how much of excellence is credited to cumulative practice versus innate talent. In turn, this determines expected personal success and subsequent learning effort. These links are conditioned by fixed vs. incremental beliefs and buffered by domain self-efficacy. Under fixed beliefs, upward comparisons to experts depress trainee success expectations by obscuring the work behind the trainer's mastery. Under incremental beliefs the same comparison is motivating. In short, the extent to which FLEs embrace learning largely sets their performance trajectory. We next detail the theoretical contributions, the managerial implications, and avenues for future research.

Theoretical Implications

We recast early tenure learning for FLEs as a proxy social comparison problem. Novices lack a personal performance history and therefore forecast their own prospects from expert demonstrations. Building on social comparison theory, our model specifies when upward comparison is most consequential (during training/onboarding), what novices actually infer (effort attribution), and how those inferences propagate to expected personal success and learning effort. By formalizing the moderated mediation chain, we move beyond generic references to "role models" or "mindset" and provide a precise, testable account of how observation translates into motivation for FLEs.

We introduce cumulative-effort bias that explains why exposure to excellence sometimes demotivates rather than inspires. When the effort behind mastery is invisible, observers under-attribute performance to long-run practice, coaching, and strategy refinement and over-attribute it to fixed talent. This attributional error is not merely noise; our theory predicts it systematically for trainees endorsing fixed beliefs, producing lower EA, depressed EPS, and curtailed LE in the face of high PTE. Conversely, incremental beliefs bias EA upward and render the same demonstration attainable. This contribution integrates attribution theory with social comparison by identifying effort visibility as the hinge variable and by naming a theoretically tractable remedy—effort transparency—that flips upward comparison from intimidation to instruction.

Sales and service research has noted that empowerment and discretion can raise ambiguity for novices. Our model explains how and when this occurs. High discretion usually brings greater exposure to exemplars and performance information. Without cues about the process that produced excellence, fixed-belief trainees are more likely to infer fixed ability, reducing expected personal success and learning effort. Thus, empowerment's benefits depend not only on resource-demand balance but also on the attributional meaning trainees assign to expert performance. This person-situation clarifies mixed evidence on the returns to early autonomy.

The mindset literature often treats implicit beliefs as global beliefs about intelligence. We position implicit beliefs about selling and service skills as the theoretically relevant lens for FLEs. Doing so unifies disparate findings in adaptive selling, negotiation, and feedback-seeking under a single meaning-system account and predicts that domain-specific measures (e.g., beliefs about selling ability) will explain variance in training-stage motivation above and beyond general goal orientation. This sharpens construct validity and offers clarity into employee-side learning behavior.

Finally, this work advances FLE theory by replacing broad prescriptions to "instill a growth mindset" with a mechanistic pathway that scholars can measure and managers can design around. The central theoretical move is to locate effort attribution as the pivot between observing expertise and committing effort and to show that implicit beliefs are the lens that turns the same stimulus into either inspiration or helplessness. In doing so, we extend social comparison, attribution, and goal orientation perspectives to the specific realities of FLE onboarding and explain how training environments that showcase excellence can inadvertently create learned inefficacy for a sizable subset of the workforce.

Managerial Implications

The relevance of this research is especially pertinent for managing FLE performance. Early-tenure FLEs judge their own prospects by watching experts. If excellence is read as talent, novices' expected personal success drops and their learning effort follows, especially for those with fixed beliefs. If excellence is read as the result of cumulative effort, expected personal success and learning effort rise. Managerial levers should therefore raise effort attribution and, through it, expected personal success. Translating these insights into practice requires identifying implicit beliefs in novice FLEs, designing training environments that make effort visible, staging comparisons thoughtfully, tailoring development approaches to individual belief profiles, and managing high-performance signals.

Managers should assess general implicit beliefs and domain-specific self-efficacy at onboarding and use these to segment coaching rather than screen candidates. We recommend assessing implicit beliefs using the Implicit Person Theory Scale from Dweck, Chiu and Hong (1995). For higher fixed-belief profiles, managers should add more effort-transparency content, near-peer modeling, and early mastery experiences. For higher incremental-belief profiles, increase stretch and self-directed practice. For new hires with higher fixed-belief profiles, training should include explicit effort-transparency modules (e.g., trainers sharing their learning trajectory, early mistakes, and time investments), near-peer modeling that offers relatable performance benchmarks, and structured early mastery experiences to boost self-efficacy quickly. For those with higher incremental-belief profiles, managers can accelerate development by introducing greater stretch challenges earlier, incorporating more self-directed practice, and emphasizing opportunities for experimentation. By tailoring developmental approaches to belief profiles, managers can preempt early-tenure disengagement and create conditions where all FLEs, regardless of initial mindset, can translate training into sustained learning engagement and role competence.

One of the most direct interventions is to show the work behind expert performance. Trainers should narrate their own learning history, by describing practice hours, early failures, coaching interventions, and strategy refinements. Instead of presenting “perfect demo” videos, for example, use progress reels showing skill evolution from early attempts to intermediate proficiency to current mastery.

Similarly, rather than exposing novices immediately to the highest-performing experts, managers should design skill ladders to sequence role models from near-peers to top performers. This scaffolding ensures that upward comparison gaps feel attainable. Managers can pair new hires with mentors who share similar backgrounds, tenure, or learning experiences to promote assimilation rather than contrast. Training schedules can intentionally space exposure to elite performers until foundational confidence is established.

Managers should consider how performance gaps are highlighted. For example, managers could replace early-stage leaderboards, which can disproportionately highlight performance gaps, with time-to-competency curves and median improvement benchmarks. In onboarding, managers should set proximal learning goals (e.g., “handle two more customer objections successfully this week”) before introducing competitive ranking metrics. This reframes ability as something that progresses over time and reduces the likelihood of fixed-belief employees concluding that excellence is unattainable.

Since self-efficacy acts as a buffer against negative interpretations of expert performance, managers can engineer early wins by designing practice scenarios with high success probability before introducing complex customer challenges. Error-friendly practice environments, such as role-plays with redo loops can normalize mistakes as part of the learning process and sustain engagement.

Lastly, managers must be deliberate and careful with high-performance signals, since broadcasting raw top-performer metrics early in onboarding can discourage fixed-belief employees. If high-performance data is shared, pair it with learning histories and time-to-reach benchmarks to contextualize achievements. This should prevent premature talent labeling and help maintain perceived attainability of expert performance.

To sum up, excellence on display is a doubleedged sword. Without effort transparency and ladderred comparisons, expert showcases can demotivate the very novices they are meant to inspire, especially those with fixed beliefs. Designing training to make cumulative effort visible, similar paths attainable, and early wins likely converts upward comparison into a sustained engine for learning and performance.

Future Research Opportunities

There are ample opportunities for future work to reinforce and expand the current work’s conceptualizations. Future research should focus on measuring and empirically validating the hypotheses presented in our conceptual model. While the present work articulates a theoretically grounded mechanism linking implicit beliefs, effort attribution, and expected personal success, empirical testing is essential to determine the magnitude and robustness of these effects across different FLE contexts and industries. Experimental and longitudinal designs could assess how manipulating effort transparency, staging comparisons, and tailoring training interventions affects learning engagement and downstream performance outcomes.

Another promising direction is exploring the delicate balance between helping FLEs embrace ambiguity and providing sufficient structure to maintain confidence and forward momentum. Ambiguity can foster adaptability, yet unmanaged ambiguity can produce disengagement, particularly for those with fixed beliefs. Future studies could examine which types of ambiguity (e.g., task, role, outcome) are most beneficial versus harmful, and how different coaching or onboarding approaches moderate these effects.

Finally, since of today's onboarding and skills development occurs via asynchronous or virtual platforms, trainees may be even less likely to witness the "messy middle" of skill acquisition. Researchers could investigate how different modes of effort transparency, such as annotated video progressions, interactive performance timelines, or peer discussion boards, affect effort attribution and learning engagement for both fixed- and incremental-belief trainees.

References

- Ahearne, M., Lam, S. K., Mathieu, J. E., & Bolander, W. (2010). Why are some salespeople better at adapting to organizational change? *Journal of Marketing*, 74(3), 65–79.
- Anseel, F., Beatty, A. S., Shen, W., Lievens, F., & Sackett, P. R. (2015). How are we doing after 30 years? A meta-analytic review of the antecedents and outcomes of feedback-seeking behavior. *Journal of management*, 41(1), 318-348.
- Bak, H., & Yi, Y. (2025). Cultures of genius in unequal societies: The impact of perceived economic inequality on preferences for talent over effort. *Journal of Business Research*, 199, 115512.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 84(2), 191.
- Bankert, L., Dhar, J., Wasserteil, S., Verghese, M., Roehri, C., Di Prizio, C., & Negreros, A. (2024). Supporting frontline workers is a boon to the bottom line. *BCG Global*. <https://www.bcg.com/capabilities/diversity-inclusion/expert-insights/supporting-frontline-workers-boon-to-bottom-line>
- Bell, B. S., & Kozlowski, S. W. (2008). Active learning: effects of core training design elements on self-regulatory processes, learning, and adaptability. *Journal of Applied psychology*, 93(2), 296.
- Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child development*, 78(1), 246-263.
- Brassey, J., De Smet, A., Maor, D., & Rabipour, S. (2024, December 6). Developing a resilient, adaptable workforce for an uncertain future. McKinsey & Company. Retrieved from <https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/developing-a-resilient-adaptable-workforce-for-an-uncertain-future>
- Burnette, J. L., O'Boyle, E. H., VanEpps, E. M., Pollack, J. M., & Finkel, E. J. (2013). Mindsets matter: A metaanalytic review of implicit theories and selfregulation. *Psychological Bulletin*, 139(3), 655–701.
- Buunk, A. P., & Gibbons, F. X. (2007). Social comparison: The end of a theory and the emergence of a field. *Organizational behavior and human decision processes*, 102(1), 3-21.
- Canfield, B. R. *Sales Administration, Principles and Problems*. 4th ed. Englewood. Cliffs, N.J., Prentice-Hall, 1961.
- Coelho, F., Augusto, M., & Lages, L. F. (2011). Contextual factors and the creativity of frontline employees: The mediating effects of role stress and intrinsic motivation. *Journal of Retailing*, 87(1), 31-45.
- Collins, R. L. (1996). For better or worse: The impact of upward social comparison on self-evaluations. *Psychological bulletin*, 119(1), 51.
- Cron, W. L., Baldauf, A., Leigh, T. W., & Grossenbacher, S. (2014). The strategic role of the sales force: Perceptions of senior sales executives. *Journal of the Academy of Marketing Science*, 42(5), 471-489.

- Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, 41(10), 1040-1048.
- Dweck, C. S. (1999). Self-theories: Their role in motivation, personality, and development. Philadelphia: Psychology Press.
- Dweck, C. S., Chiu, C. Y., & Hong, Y. Y. (1995). Implicit theories and their role in judgments and reactions: A word from two perspectives. *Psychological inquiry*, 6(4), 267-285.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95(2), 256-273.
- Evans, K. R., Arnold, T. J., & Grant, J. A. (1999). Combining service and sales at the point of customer contact: A retail banking example. *Journal of Service Research*, 2(1), 34-49.
- Farellacci, R., & Hollet-Haudebert, S. (2021, June). Mindset and goal orientation in sales: results from a qualitative approach. In *Academy of Marketing Science Annual Conference-World Marketing Congress* (pp. 283-297). Cham: Springer International Publishing.
- Festinger, L. (1954). A theory of social comparison processes. *Human relations*, 7(2), 117-140.
- Gabler, C. B., Ogilvie, J. L., Rapp, A., & Bachrach, D. G. (2017). Is there a dark side of ambidexterity? Implications of dueling sales and service orientations. *Journal of Service Research*, 20(4), 379-392.
- Gallup, Inc. (2024). *State of the Global Workplace: 2024 report*. Gallup. Retrieved from <https://www.gallup.com/workplace/349484/state-of-the-global-workplace.aspx?thank-you-report-form=1>
- Gill, O. (2025, May 10). Smile and your hotel guests will smile with you. The tech says so. *The Sunday Times* (Business & Money).
- Gillison, S. T., Beatty, S. E., Northington, W. M., & Vivek, S. (2023). FLEs' concerns with misbehaving customers in the time of COVID and beyond. *Journal of Service Theory and Practice*, 33(6), 771-795.
- Greenberg, H., & Mayer, D. (1964). A new approach to the scientific selection of successful salesmen. *The journal of psychology*, 57(1), 113-123.
- Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A metaanalysis of antecedents and correlates of employee turnover. *Journal of Management*, 26(3), 463-488.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Businessunitlevel relationship between employee satisfaction, employee engagement, and business outcomes. *Journal of Applied Psychology*, 87(2), 268-279.
- Hastie, R. (2001). Problems for judgment and decision-making. *Annual Review of Psychology*, 52(1), 653-683.
- Hunter, G. K., & Perreault Jr, W. D. (2007). Making sales technology effective. *Journal of Marketing*, 71(1), 16-34.
- Iqbal, J., Shagirbasha, S., & Madhan, K. (2024). Empowering frontline service employees: examining the link between psychological empowerment, prosocial motivation and proactive behavior through the lens of horizontal collectivism. *Journal of Service Theory and Practice*, 34(5), 664-688.
- Jain, S. P., Mathur, P., Isaac, M. S., Mao, H., & Maheswaran, D. (2024). Brand extension failure and parent brand penalty: The role of implicit theories. *Journal of Consumer Psychology*, 34(1), 49-65.
- Keating, L. A., & Heslin, P. A. (2015). The potential role of mindsets in unleashing employee engagement. *Human resource management review*, 25(4), 329-341.

- Kelly, E. L. (1955). Consistency of the adult personality. *American Psychologist*, 10(11), 659.
- Kim, M. H. (2023). A bioecological perspective on mindset. *Contemporary Educational Psychology*, 73, 102173.
- Kray, L. J., & Haselhuhn, M. P. (2007). Implicit negotiation beliefs and performance: Experimental and longitudinal evidence. *Journal of personality and social psychology*, 93(1), 49.
- Lam, S. K., & Van der Borgh, M. (2021). On salesperson judgment and decision making. *Journal of the Academy of Marketing Science*, 49(5), 855-863.
- Levy, S. R., Stroessner, S. J., & Dweck, C. S. (1998). Stereotype formation and endorsement: The role of implicit theories. *Journal of personality and social psychology*, 74(6), 1421.
- Martin, R., Suls, J., & Wheeler, L. (2002). Ability evaluation by proxy: Role of maximal performance and related attributes in social comparison. *Journal of personality and social psychology*, 82(5), 781.
- Mathur, P., Chun, H. H., & Maheswaran, D. (2016). Consumer mindsets and self-enhancement: Signaling versus learning. *Journal of Consumer Psychology*, 26(1), 142-152.
- Molden, D. C., & Dweck, C. S. (2006). Finding "meaning" in psychology: a lay theories approach to self-regulation, social perception, and social development. *American psychologist*, 61(3), 192.
- Mueller, C. M., & Dweck, C. S. (1998). Praise for intelligence can undermine children's motivation and performance. *Journal of personality and social psychology*, 75(1), 33.
- Murphy, M. C., & Dweck, C. S. (2016). Mindsets shape consumer behavior. *Journal of Consumer Psychology*, 26(1), 127-136.
- Northington, W. M., Gillison, S. T., Beatty, S. E., & Vivek, S. (2021). I don't want to be a rule enforcer during the COVID-19 pandemic: frontline employees' plight. *Journal of Retailing and Consumer Services*, 63, 102723.
- Novell, C. A., Machleit, K. A., & Sojka, J. Z. (2016). Are good salespeople born or made? A new perspective on an age-old question: Implicit theories of selling ability. *Journal of Personal Selling & Sales Management*, 36(4), 309-320.
- Nussbaum, A. D., & Dweck, C. S. (2008). Defensiveness versus remediation: Self-theories and modes of self-esteem maintenance. *Personality and Social Psychology Bulletin*, 34(5), 599-612.
- Ogilvie, J., Rapp, A., Bachrach, D. G., Mullins, R., & Harvey, J. (2017). Do sales and service compete? The impact of multiple psychological climates on frontline employee performance. *Journal of Personal Selling & Sales Management*, 37(1), 11-26.
- Park, J. K., & John, D. R. (2010). Got to get you into my life: Do brand personalities rub off on consumers?. *Journal of consumer research*, 37(4), 655-669.
- Park, J. K., & John, D. R. (2012). Capitalizing on brand personalities in advertising: The influence of implicit self-theories on ad appeal effectiveness. *Journal of Consumer Psychology*, 22(3), 424-432.
- Paunesku, D., Walton, G. M., Romero, C., Smith, E. N., Yeager, D. S., & Dweck, C. S. (2015). Mind-set interventions are a scalable treatment for academic underachievement. *Psychological science*, 26(6), 784-793.
- Pedersen, C. L. (2021). Taking matters into one's own hands? Addressing the relational nature of FLE autonomy. *Journal of Business Research*, 136, 366-376.

- Riedel, A., Beatson, A., Worsteling, A., Mulcahy, R. F., & Keating, B. W. (2023). Vulnerability on the frontline: systematic review and meta-analysis of frontline employee vulnerability. *Journal of Service Management*, 34(5), 867-895.
- Saxe, R., & Weitz, B. A. (1982). The SOCO scale: A measure of the customer orientation of salespeople. *Journal of marketing research*, 19(3), 343-351.
- Scherer, R., & Campos, D. G. (2022). Measuring those who have their minds set: An item-level meta-analysis of the implicit theories of intelligence scale in education. *Educational Research Review*, 37, 100479.
- Sik, K., Cummins, J., & Job, V. (2024). An implicit measure of growth mindset uniquely predicts post-failure learning behavior. *Scientific Reports*, 14(1), 3761.
- Singh, J. (2000). Performance productivity and quality of frontline employees in service organizations. *Journal of Marketing*, 64(2), 15-34.
- Schneider, B., White, S. S., & Paul, M. C. (1998). Linking service climate and customer perceptions of service quality: Tests of a causal model. *Journal of applied Psychology*, 83(2), 150.
- Spiro, R. L., & Weitz, B. A. (1990). Adaptive selling: Conceptualization, measurement, and nomological validity. *Journal of marketing Research*, 27(1), 61-69.
- Stock, R. M., & Hoyer, W. D. (2005). An attitude-behavior model of salespeople's customer orientation. *Journal of the academy of marketing science*, 33(4), 536-552.
- Sujan, H., Weitz, B. A., & Kumar, N. (1994). Learning orientation, working smart, and effective selling. *Journal of Marketing*, 58(3), 39-52.
- Vansteenkiste, M., Lens, W., Elliot, A. J., Soenens, B., & Mouratidis, A. (2014). Moving the achievement goal approach one step forward: Toward a systematic examination of the autonomous and controlled reasons underlying achievement goals. *Educational Psychologist*, 49(3), 153-174.
- Wheeler, L., Martin, R., & Suls, J. (1997). The proxy model of social comparison for self-assessment of ability. *Personality and Social Psychology Review*, 1(1), 54-61.
- Wood, J. V. (1989). Theory and research concerning social comparisons of personal attributes. *Psychological bulletin*, 106(2), 231.
- Yeager, D. S., Hanselman, P., Walton, G. M., Murray, J. S., Crosnoe, R., Muller, C., & Dweck, C. S. (2019). A national experiment reveals where a growth mindset improves achievement. *Nature*, 573(7774), 364-369.
- Yoo, J., Arnold, T. J., & Frankwick, L. G. (2014). Promoting boundary-spanning behavior among service personnel. *European Journal of Marketing*, 48(9/10), 1626-1647.

Appendix

Table 1 Construct Definitions from Model Conceptual Model

Construct	Definition
Perceived Trainer Expertise (PTE)	Trainee's judgment that the trainer exhibits high proficiency on core role tasks (e.g., accuracy, speed, conversion, service recovery skill).
Implicit Beliefs about Ability (IB)	Endorsement of fixed vs. incremental beliefs about ability.
Effort Attribution (EA)	Degree to which the trainee explains trainer performance by accumulated effort/learning (high EA) versus innate talent (low EA)

Expected Personal Success (EPS)	Subjective probability of meeting role benchmarks (e.g., “likelihood I can reach trainer’s proficiency”).
Learning Effort (LE)	Time and energy invested in training activities (e.g., deliberate practice minutes, number of feedback requests, persistence after errors).
Domain Self-Efficacy (DSE)	Confidence in performing specific role tasks.

Summary Brief

Behind the Counter: How Luxury Service Encounters in Mixed-Class Retail Shape Inclusion, Acculturation, and Aspirational Belonging

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Luxury brands are increasingly present in mixed-class retail environments, such as department stores, where they engage a more diverse clientele. In these socially complex spaces, frontline employees must balance exclusivity with emotional accessibility. While prior research has focused on how brands signal luxury through materiality and exclusivity, less is known about how frontline service encounters shape class-based experiences. Building on Bourdieu's theory of cultural capital and institutional logics, we develop a conceptual model that identifies three service-based class pathways: exclusion, insider affirmation, and aspirational inclusion. The third pathway reflects how employees selectively extend warmth and recognition to aspirational consumers who do not yet fully belong but express upward mobility. This study contributes to luxury brand research by theorizing how frontline interactions produce belonging and negotiate social class boundaries.

Introduction

Luxury brands have increasingly shifted their focus from traditional elites to aspirational consumers, driven by globalization, rising affluence, and the pursuit of continued growth (Kapferer & Bastien, 2012). This shift has introduced more accessible retail formats such as department stores and outlet malls, designed to broaden reach while maintaining exclusivity. These hybrid environments bring together consumers from diverse social backgrounds, complicating the maintenance of core luxury principles such as rarity, controlled access, and social distance. This need to retain exclusivity while appealing to aspirational consumers raises important questions about how luxury brands manage class distinctions in everyday service encounters (Dion & Borraz, 2017). While prior research has explored how consumers use luxury goods to signal social status through possessions and cultural markers (e.g., Veblen, 1899; Bourdieu, 1984), fewer studies have examined how brands shape luxury through frontline interactions. Recent work addresses this gap by examining how service encounters contribute to class boundary negotiation and consumer subjectivity (Dion & Borraz, 2017). Yet most of this research remains centered on elite flagship boutiques, providing limited insight into boundary negotiation in more socially diverse retail settings. Building on Dion and Borraz's (2017) theorization of exclusion (class gatekeeper) and insider affirmation (class model and class broker), which describe how frontline employees either deny or confirm a consumer's perceived class belonging, we introduce a third pathway: aspirational inclusion ("class enabler"). This pathway explains how frontline employees engage non-elite consumers who signal upward mobility by offering warmth and guided access while preserving the brand's status hierarchy. We show how luxury service encounters can produce experiences of inclusion, acculturation, and aspirational belonging. Rather than focusing solely on materiality and communication, our research emphasizes the performative dimensions of luxury branding, showing how class boundaries are negotiated and softened through employee scripts and affective cues. These interactions enable aspirational non-elites to access the brand's world. Our study contributes to broader discussions on luxury brand management, class-based consumer subjectivity, and the negotiation of social boundaries in market interactions.

Conceptual Overview

Service encounters in luxury settings carry significant social meaning. Prior research shows that frontline employees play a central role in reinforcing class boundaries. Across luxury contexts, employees act as status gatekeepers, affirming high-status clients while subtly excluding those who lack the expected cultural fluency (Dion & Borraz, 2017; Sherman, 2007; Bernauer, Sieben, & Haunschild, 2022). In Sherman's (2007) ethnography of luxury hotels, staff used deferential gestures to elevate elite guests while minimizing intimacy with less-favored clients. Bernauer et al. (2022) show how luxury workers use gendered scripts to manage classed expectations of refinement and familiarity. Dion and Borraz (2017) synthesize this pattern by identifying two service pathways: exclusion, performed by class gatekeepers, and insider affirmation, enacted by class models and brokers. Together, these studies

suggest that class boundaries are shaped not just through pricing, but also through the micro-performance of service work itself. Building on prior research that identifies exclusion and insider affirmation as key service-based class pathways, we propose a third: aspirational inclusion. This pathway explains how frontline employees engage consumers who do not yet fully belong but signal upward mobility and brand attachment. While exclusion reinforces distance and insider affirmation confirms belonging, aspirational inclusion invites promising consumers through calibrated warmth, attentiveness, and subtle recognition. Rather than collapsing the brand's hierarchy, this engagement provides guided access and supports acculturation, positioning the employee as a "class enabler" who helps them align with luxury norms. This pathway is especially relevant in democratized retail settings like department stores and outlet malls, where employees must navigate competing institutional logics of prestige and accessibility (Nueno & Quelch, 1998; Thornton, Ocasio, & Lounsbury, 2012). Unlike rigid encounters in elite boutiques, aspirational inclusion offers a strategic, future-oriented script that maintains exclusivity while building long-term brand loyalty. Consumers may lack full cultural capital but exhibit aspirational cues such as emotional engagement, refined demeanor, or symbolic alignment, which prompt frontline employees to offer measured inclusion rather than rejection or full affirmation.

Theoretically, this pathway draws on two interrelated forces: employees' interpretation of consumers' actual and potential cultural capital (Bourdieu, 1984) and the institutional logics that guide service practices in luxury retail. When aspirational consumers are seen as promising fits, employees may improvise inclusive gestures that reconcile status preservation with brand growth goals. These encounters highlight the performative nature of frontline work, showing how class distinctions are not only maintained or dissolved but reimagined in ways that support aspirational belonging while retaining brand value.

Conclusion

Aspirational inclusion is especially relevant in department stores, where employees navigate competing logics of prestige and accessibility. Our model shows it acts as a strategic script that preserves exclusivity and builds loyalty. By distinguishing this pathway from exclusion and insider affirmation, we show how class boundaries are not only reinforced or bridged but reimagined through service encounters. These dynamics highlight the role of frontline employees in recognizing aspirational signals and mediating class transitions. Theoretically, this model contributes to research on class-based consumer subjectivity and the service encounter's role in status construction. Managerially, it underscores the need to train staff to support aspirational consumers without weakening brand prestige.

References

- Bernauer, V. S., Sieben, B., & Haunschild, A. (2023). "You can call me Susan!" Doing gendered class work in luxury service encounters. *Equality, Diversity and Inclusion: An International Journal*, 42(4), 494-511.
- Bourdieu, P. (1984). A social critique of the judgement of taste. *Cambridge, MA*.
- Dion, D., & Borraz, S. (2017). Managing status: How luxury brands shape class subjectivities in the service encounter. *Journal of marketing*, 81(5), 67-85.
- Jain, V., Modi, P., Ganesh, B. E., & Chauhan, D. (2016). Understanding the emergence of aspirational luxury and the role of digital platforms among women consumers in India. *NMIMS Management*, 32.
- Kapferer, J. N., & Bastien, V. (2017). The specificity of luxury management: Turning marketing upside down. *Advances in luxury brand management*, 65-84.
- Kapferer, J. N., & Bastien, V. (2012). *The luxury strategy: Break the rules of marketing to build luxury brands*. Kogan page publishers.
- Nueno, J. L., & Quelch, J. A. (1998). The mass marketing of luxury. *Business horizons*, 41(6), 61-68.
- Sherman, R. (2007). *Class acts: Service and inequality in luxury hotels*. Univ of California Press.
- Thornton, P. H., Ocasio, W., & Lounsbury, M. (2012). *The institutional logics perspective: A new approach to culture, structure, and process*. Oxford University Press.

Veblen, T. (2017). *The theory of the leisure class*. Routledge.

Summary Brief

When Ratings Persuade: How Online Ratings Reduce Unfamiliarity at the Start of the Online Journey

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Drawing on cue-utilization theory, we examine how online star ratings shape consumers' first-impression judgments at the initial stage of the e-commerce journey. We propose that ratings operate as extrinsic signals that reduce retailer unfamiliarity, thereby improving perceived product quality and increasing purchase intention. Across three 2×2 between-subjects experiments, we test the effects of ratings on perceived quality and purchase intention, whether ratings reduce perceived unfamiliarity and enhance initial engagement, and the roles of valence and volume when the retailer is unfamiliar. Results show that ratings meaningfully offset unfamiliarity and guide early buyer-seller formation. The paper contributes to cue-centric and eWOM research by clarifying when and how rating signals are diagnostic at the outset of the online journey and by identifying retailer familiarity as a boundary condition to enhance the early consumer experience.

Introduction

In online purchase contexts where direct inspection of the product or seller is impossible, consumers turn to other consumers' rating signals to reduce uncertainty and form purchase intentions. Ratings and reviews summarize dispersed experiences and are often considered more trustworthy than firm-generated content, making them especially influential at the moment of first contact. Despite extensive work on electronic word-of-mouth (eWOM), the nuances of the early phases of e-commerce remain underexplored, indicating the need for greater clarity about how ratings operate at the very start of the journey, when retailer unfamiliarity is high.

This initial stage is consequential: first impressions, formed within seconds, can anchor subsequent evaluations and behavior. As markets globalize and subjective evaluation increasingly transcends geography, understanding how ratings guide early judgments about unfamiliar retailers becomes ever more important. We focus on two components emphasized in prior work, valence (mean rating) and volume (number of ratings), and consider how these elements shape perceived diagnosticity, purchase intention, and the experience of initial engagement.

Background

Building on cue-utilization research, both extrinsic (e.g., brand, price, ratings) and intrinsic (e.g., material, design) cues can contribute to predictive value and confidence value in judgment. Online ratings are salient in e-commerce because they are readily visible, low-cost to process, and often perceived as more credible than firm-generated messages. A central context factor at the start of the online journey is retailer familiarity, the consumer's accumulated experience with a retailer's website that shapes attitudes, perceptions, and behavioral intentions. When familiarity is low, uncertainty is high and consumers rely more heavily on available cues. Ratings should therefore be especially diagnostic under unfamiliarity, helping consumers form first impressions about quality and whether to engage.

Within ratings, presence, volume, and valence are three features with distinct theoretical roles. Presence makes a heuristic quality signal available at all, potentially raising perceived quality and purchase intention at first contact. Volume can increase credibility and perceived reliability of the signal, thereby boosting confidence value; valence provides directional information about expected quality. Under unfamiliarity, consumers should weigh these features more heavily, with positive valence and high-volume mitigating uncertainty; by contrast, negative valence can deter purchase even when volume is substantial.

Key Findings

We conducted three experiments examining rating presence × retailer familiarity, rating volume under neutral valence × retailer familiarity, and rating valence × volume interactions in unfamiliar contexts. Key findings include:

Study 1 demonstrated fundamental rating presence effects. Displaying ratings significantly increased both perceived quality ($M = 5.29$ vs. 4.87) and purchase intention ($M = 4.78$ vs. 4.32) compared to no ratings. Critically, these effects were stronger when the retailer was unfamiliar versus familiar. For unfamiliar retailers, ratings produced significant improvements in both quality perceptions ($t = -2.13$, $p = .048$) and purchase intentions ($t = -2.25$, $p = .036$), while familiar retailers showed no significant changes despite large effect sizes.

Study 2 revealed selective volume effects under neutral ratings. When ratings were neutral (3.0 stars), volume effects varied by retailer familiarity. Under low volume conditions, unfamiliar retailers showed significantly higher purchase intentions than familiar retailers. However, under high volume conditions, these familiarity-based differences disappeared, suggesting that volume serves as an equalizing mechanism. Within-group analysis showed that only unfamiliar retailers benefited from increased volume, with significant improvements in purchase intentions ($t = -3.27$, $p = .002$).

Study 3 uncovered the dominance of valence over volume. In unfamiliar retailer contexts, rating valence proved more influential than volume. Shifts from negative to positive valence significantly improved both quality perceptions and purchase intentions regardless of volume level, with effect sizes ranging from $d = 0.97$ to $d = 1.71$. Conversely, volume increases while holding valence constant produced no significant effects, indicating that directional quality information matters more than credibility signals when retailer familiarity is absent.

These findings establish that ratings function as substitutable informational resources that compensate for missing experiential knowledge, with their diagnostic value systematically varying based on retailer familiarity. The research advances cue-utilization theory by demonstrating that the same informational cue assumes different roles as contextual uncertainty changes, contributing to both theoretical understanding and practical guidance for rating system design in digital marketplaces.

References

- Darke, P. R., Brady, M. K., Benedicktus, R. L., & Wilson, A. E. (2016). Feeling close from afar: The role of psychological distance in offsetting distrust in unfamiliar online retailers. *Journal of Retailing*, 92(3), 287-299.
- Filieri, R. (2015). What makes online reviews helpful? A diagnosticity-adoption framework to explain informational and normative influences in e-WOM. *Journal of Business Research*, 68(6), 1261-1270.
- Lei, Z., Yin, D., Mitra, S., & Zhang, H. (2022). Swayed by the reviews: Disentangling the effects of average ratings and individual reviews in online word-of-mouth. *Production and Operations Management*, 31(6), 2393-2411.
- Mishra, S., Malhotra, G., & Saxena, G. (2021). In-store marketing of private labels: Applying cue utilisation theory. *International Journal of Retail and Distribution Management*, 49(1), 145-163.

Summary Brief

Influence of the Regional Accents on the Effectiveness of Product Advertising among Customers from Different Regions

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Accent is a manner of pronunciation peculiar to a particular individual, location, or nation (Van Herk, 2012). To capture different target customers, in recent years, more and more companies have used different accents in their product advertisements (Hendriks et al. 2019). The importance of the use of different accents in advertising can be further reflected by companies' increasing demand for multilingual voice-over talents who can master different accents. This research aims to explore whether there is a differential effect on the advertising effectiveness marked by spokesperson credibility and various customer outcomes, between a regional accent that is congruent with the geographic origin of the promoted product and a regional accent that is not. Drawing on Language Expectancy Theory (LET), a conceptual model is proposed and tested with two empirical studies. The findings not only highlight the importance for marketers to figure out the appropriate accent design in advertising, but also indicate that using an accent congruent with the product origin in the advertisements can lead to more positive customer outcomes, regardless of where the customers are from.

Introduction

Accent is a manner of pronunciation peculiar to a particular individual, location, or nation (Van Herk, 2012). To capture different target customers, in recent years, more and more companies have used different accents in their product advertisements (Hendriks et al. 2019). The importance of the use of different accents in advertising can be further reflected by companies' increasing demand for multilingual voice-over talents who can master different accents. This research aims to explore whether there is a differential effect on the advertising effectiveness marked by spokesperson credibility and various customer outcomes, between a regional accent that is congruent with the geographic origin of the promoted product and a regional accent that is not. Drawing on Language Expectancy Theory (LET), a conceptual model is proposed and tested with two empirical studies.

Background

The use of different accents in advertising as well as its influence on advertising effectiveness have drawn more and more attention from scholars in recent years (e.g., Morales et al., 2012; Liu et al., 2013). Yet, the comparison in advertising effectiveness between different regional accents (e.g., Southern American Accent, and Northern American accent) within the same country (e.g., USA) remains to be specifically investigated, which is our focus in this research. Some scholars also delved into the potential influence of accent-product congruence (i.e., whether the spokesperson's accent is consistent with the geographic origin of the advertised product) on advertising effectiveness (e.g., Morales et al., 2012; Hendriks et al., 2015), but with mixed results. Therefore, it is necessary to take accent-product congruence into consideration when investigating the influence of regional accents on advertising effectiveness, which is another focus of our current research.

LET, first proposed by Burgoon et al. (1978), is a theory of persuasion assuming language is a rules-based system, in which people develop expected norms as to appropriate language usage in given situations. Furthermore, unexpected linguistic usage can make a message less persuasive (Burgoon and Burgoon, 2001). Previous studies (e.g., Lwin and Wee, 1999) had shown that accent affects source credibility. Therefore, it can be expected that when a regional accent is more congruent with the geographic origin of the promoted product, it is more likely to be consistent with customers' expectations, which contributes to better spokesperson creditability. Hence,

H1: When a regional accent used by a spokesperson is more congruent with the geographic origin of the promoted product, it leads to higher spokesperson credibility.

Previous marketing research (e.g., Lafferty *et al.*, 2002; Sallam and Wahid, 2012) demonstrated the positive and direct effect of spokesperson credibility on various customer variables, such as customers' related attitudes, visit intentions, and positive word-of-mouth (WOM) intentions. Since advertising is one of the important components of marketing activities, this effect is expected to also exist in the current research context of regional accents in advertising. Therefore,

H2: Spokesperson credibility is positively related to customer outcomes regarding the advertisement, include their a) attitudes towards the advertisement (Aad), b) intentions to visit the related business, and c) WOM intentions.

H3: Spokesperson credibility mediates the relationship between regional accents and customer outcomes, include their a) Aad, b) intentions to visit the related business, and c) WOM intentions.

Key Findings

To test the hypotheses, two empirical studies were conducted in the context of a radio advertisement for a restaurant promoting its signature seafood product, crawfish. For both studies, a between-subjects experimental design consisting of two scenarios (spokesperson in a typical Southern accent versus spokesperson in a typical Northern accent) was used, while Study 1 collected the online survey data from the native residents (N = 218) in six Southern States (AL, GA, MS, NC, SC, and TN), and Study 2 from the native residents (N = 223) in six Northern States (IL, IN, MI, MN, OH, and WI). All the participants were U.S. adult consumers, recruited via Prolific.

In Study 1, online survey participants were randomly assigned to one of the two experimental scenarios, and they were first asked to read through a description of a Southern seafood restaurant in their local region, and then listen to a recording simulating the radio advertisement for the restaurant's signature product (i.e., crawfish), which was either in Alabama accent (scenario 1) or in Michigan accent (scenario 2). In Study 2, participants were also randomly assigned to one of the two experimental scenarios, and they were first asked to imagine that they were on vacation in the South and to read through a description of a Southern seafood restaurant in the region where they were on vacation. Then they were asked to listen to a recording simulating the radio advertisement for the restaurant's crawfish, which was either in Alabama accent or in Michigan accent. The two speakers (one in AL accent and one in MI accent) were both male voice-over professionals recruited from a voice-over service agency based in Orlando, Florida. After listening to the recordings, all the participants were asked a series of questions related to the key variables in this study, along with questions for attention and manipulation check. Constructs for the key variables in this study were all adapted from established scales, and their reliability, convergent validity, and discriminant validity were assessed via the confirmatory factor analysis in both Study 1 and Study 2, which all satisfied the related criteria.

Model 4 of PROCESS for SPSS (Hayes 2020) was used to analyze the structural relationships in the proposed model, and all the related hypotheses were sufficiently supported for both Study 1 and Study 2. Through these two empirical studies, we have found that when a regional accent is more congruent with the geographic origin of the promoted product, it can lead to better spokesperson credibility, regardless of where customers are from (either the local region or other region). Moreover, an enhanced spokesperson credibility not only contributes to better customer outcomes, but also fully mediates the relationship between regional accent and customer outcomes, so that the more feasible regional accent can indirectly lead to higher customer outcomes. These findings can provide important implications to both scholars and marketers.

As for theoretical implications, first, by delving into the effect of American regional accent on the advertising effectiveness, the current research contributes to enhancing the extant scholarship on accent and advertising. Second, the current research not only demonstrates the influence of accent-product congruence on spokesperson credibility and various customer outcomes, but also highlights the importance of spokesperson credibility on advertising effectiveness, with the related empirical findings.

As for managerial implications, first, the current research highlights the importance for marketers to have appropriate vocal design in their advertisements, as it does not only influence the credibility of the advertisements and the spokesperson, but also further influence various customer outcomes, such as customers' visit intentions for the related business and positive WOM intentions. Second, the current research findings also provide important

implications regarding the effective vocal design in other types of contemporary advertising, such as social media, mobile, and AI-generated advertisements.

References

- Burgoon, Judee K. & Michael Burgoon. 2001. Expectancy theories. In W. Peter Robinson & Howard Giles (eds.), *The new handbook of language and social psychology*, 79–102. Chichester John Wiley.
- Burgoon, M., Miller, M. D., Cohen, M., & Montgomery, C. L. (1978). An empirical test of a model of resistance to persuasion. *Human Communication Research*, 5(1), 27-39.
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). New York, NY: Guilford Press.
- Hendriks, B., van Meurs, F., & Behnke, G. (2019). The effect of different degrees of regional accentedness in radio commercials: An experiment with German consumers. *Journal of International Consumer Marketing*, 31(4), 302-316.
- Hendriks, B., van Meurs, F., & van der Meij, E. (2015). Does a foreign accent sell? The effect of foreign accents in radio commercials for congruent and non-congruent products. *Multilingua*, 34(1), 119-130.
- Lafferty, B. A., Goldsmith, R. E., & Newell, S. J. (2002). The dual credibility model: The influence of corporate and endorser credibility on attitudes and purchase intentions. *Journal of Marketing Theory and Practice*, 10(3), 1-11.
- Liu, S., Wen, X., Wei, L., & Zhao, W. (2013). Advertising persuasion in China: using Mandarin or Cantonese?. *Journal of Business Research*, 66(12), 2383-2389.
- Lwin, M., & Wee, C. H. (1999). The effect of an audio stimulus: accents in English language on cross-cultural consumer response to advertising. *Journal of International Consumer Marketing*, 11(2), 5-37.
- Morales, A. C., Scott, M. L., & Yorkston, E. A. (2012). The role of accent standardness in message preference and recall. *Journal of Advertising*, 41(1), 33-46.
- Sallam, M. A. A., & Wahid, N. A. (2012). Endorser credibility effects on Yemeni male consumer's attitudes towards advertising, brand attitude and purchase intention: The mediating role of attitude toward brand. *International Business Research*, 5(4), 55.
- Van Herk, Gerard. (2012). *What is sociolinguistics?* Malden, MA, and Oxford: Wiley-Blackwell.

SESSION 33.7: WHEN VALUES MEET MEASUREMENT: FROM DE-CONSUMPTION TO WOM

Moderators:

Rajat Sharma

Full Paper

Losing the True Value: Aligning Psychometric Theory with Modern Measurement Philosophy

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Psychometrics has long relied on the Classical Test Theory model $M=T+EM = T + EM=T+E$, where measurement is conceived as the sum of a true score and error. This framework, influenced by early error theory, presumes that the goal of measurement is to approximate an underlying true value. Modern metrology, however, has moved away from the true-value paradigm, emphasizing instead measurement uncertainty and the role of definitional clarity in specifying the measurand. This paper traces the philosophical evolution of “true value” in psychometrics—from Platonic ideals to Lord and Novick’s statistical formulation, Cronbach’s universe score, and latent variable models—and demonstrates that each stage reflects different theories of truth. Drawing lessons from modern metrology, the paper proposes a new path for psychometrics based on definitional uncertainty and uncertainty propagation. This approach aligns psychometric measurement with contemporary scientific philosophy while avoiding reliance on an unattainable true score.

Introduction

The main principle of psychometrics is that a measurement consists of a true value and error: $M = T + E$, which is based on the Classical Test Theory (CTT). Psychometrics adopted a principle parallel to that used in metrology, which guides measurement in natural sciences. Therefore, estimating true value is the fundamental goal of psychometrics and all the statistical apparatus is guided by that goal. The underpinning philosophy is grounded in scientific realism that the true value represents a property of reality.

However, in the last 30 years modern metrology has abandoned the concept of true value and error and developed a different measurement approach grounded in epistemology. It recognizes that true value is unachievable and therefore errors are not knowable. Modern metrology still obtains an uncertainty of measurement in the form of an interval, but uncertainty differs from error in that while error is the difference between measurement and true scores, uncertainty arises due to the limited knowledge about the measurement process. Therefore, modern metrology is about what we can learn from the measurement process and avoids strict assumptions about reality in the form of a true score and the consequences from it.

This paper aims to divert psychometrics from classical metrology and align with modern metrology. Despite the initial perception that the two approaches are different, I will show that they are much closer to each other. In the remaining of the paper, I first will discuss issues with true value in psychometrics and its philosophical foundations. Second, I will summarize the main motivations and principles behind modern metrology. Finally, I will outline a new path for measurement in psychometrics that aligns with modern metrology, albeit departing from current psychometrics practices.

Tension between psychometrics and metrology

Psychometrics received a setback in 1939, when the British Association for the Advancement of Science rejected the idea that perceptual sensory data can be measured as other physical quantities (Ferguson et al. 1940). Essentially, this amounted to refuting the scientific status of psychometrics. This prompted Stevens (1959), who was a participant in that debate, to come up the infamous classification of measurement (i.e., nominal, ordinal, interval, and ratio), which provided a space for psychometric measures to exist. In addition, psychometrics borrowed the core idea from classical metrology that a measurement consists of true value and error. Armed with these fundamentals, psychometrics built its own methodology which is quite different from the principles of metrology it wanted to follow (Rossi 2007).

The main issue is that the equation $M = T + E$ generally is unsolvable because two parameters (T and E) need to be reconstructed from one measurement, M. Metrology resolves the problem by calibrating instruments based on well-defined etalons that serve as T, which fixes T and allows evaluating E. In psychometrics, there are no etalons and therefore true value needs to be operationalized, which created conceptual issues (Maul, Torres Irribarra,

and Wilson, 2016). This issue is noted in natural sciences, where psychometrics still is critiqued heavily (e.g. Blanton and Jaccard 2006; Bringmann and Eronen 2016; Michell 2013; Toomela 2008; Trendler 2009), but many others take a moderate position trying to help social sciences (Finkelstein 2003; Mari, Lazzarotti, and Manzini 2009; Maul, Torres Iribarra, and Wilson 2016; Rossi and Berglund 2011).

Issues with “True Value” in Psychometrics

The main issue with true value in psychometrics is the need for its operationalization due to the lack of etalons and standardization. This forces psychometrics to abandon a correspondence-to-standard view of truth, adopt operational, model-based definitions of true score/latent variables, and quantify uncertainty internally within a model, rather than as deviation from a known reference. This leads to different interpretations of truth and below are a few examples.

One of the first interpretations was the Platonic true score, which naively viewed true value as corresponding to reality and representing what was intended to be measured (Sutcliffe 1965). However, Klein and Cleary (1967, 1969) demonstrated that the Platonic score does not follow the error independence required by $M=T + E$. The main reason is the lack of etalons, which forces an operational definition of a true score breaking the error structure assumptions of the CTT break (zero mean, independence from true score, etc.)

Another attempt for the operationalization of true score came from Lord and Novick (1968). They imagined a thought experiment, where a person has a true score in person, which could be obtained by multiple measurements of the person and erasing their memory after every measurement. According to $M=T + E$, the measurement would be equal to T over multiple measurements only if the expected value of $E=0$. Lord and Novick (1968) wanted to use this imaginary series of measurements to obtain T but they defined the true score as the expectation of observed scores across parallel measurements, where the expected error is zero. While they recognized the synthetic definition of that true value, and that it would depend on the measurement instrument, this approach allowed them to develop the idea of reliability, which could be obtained through test-retests on parallel forms. Essentially, reliability allowed evaluating the error variance even without knowing the true score but only using its conceptual existence. This approach was criticized (Lumsden 1976) and eventually was abandoned but the idea of reliability lived.

An alternative operationalization of true score was developed by Cronbach et al. (1972), who defined it not based on an infinite series of one measurement of a person, but on the universe of all possible measurements. A real test is a subset from the universe of tests, and to establish generalizability it is necessary to compare it to another test from the universe. The true score was defined as the “universe score”, which was the hypothetical average of all possible measurement tests. One substantial difference compared to Lord and Novick was that the different measures resulted in different errors. Although the generalizability theory did not become mainstream, one of its main advantages its comprehensive work on reliability (Webb, Shavelson, and Haertel 2006). The generalizability theory has been praised for expanding the classical test theory (Shavelson, Webb, and Rowley 1989), but also criticized for relaying on the similar problematic assumption (Lumsden 1976).

Currently, the most utilized measurement theory in psychometrics is the latent variable theory. Despite its popularity, there are substantial issues with it, which will be discussed next: no clear understanding of what a latent variable is and indeterminate results.

There is no clear understanding what a latent variable is. Bollen (2002) explored multiple formal and informal definitions of latent variables used by researchers: a hypothetical construct; a platonic interpretation of construct scores; variables that cannot be measured directly; a data reduction mechanism; statistically defined based on local independence; expected scores in the classical tradition; a function of observed variables; and variables without sample observations. He concludes that a variable can be interpreted as latent or not depending on the chosen definition, which indicates a lack of consensus. Bollen warns that the definitions of latent variables are strictly statistical, indicating that the field does not explore any semantic, language, or cognitive meaning of latent variable. He also notes that the choice whether a latent variable or the observable variables are continuous or categorical results in different statistical models each with their own operationalization of true value: the factor model, the Item Response Theory Model, the latent class model, or the mixture model. Overall, the meaning of latent variable still is elusive, which leads to different statistical models of “truth”. There is a philosophical question that arises: How is it possible to measure precisely something if we do not know what it is? Pragmatically, this is reduced to different models of truth, but it is not the scientific realism on which CTT is based.

Another deep issue with latent variables, which often is ignored, is the indeterminacy of the results, i.e., the availability of multiple solutions leading to the same model (Anderson and Rubin 1956; Mulaik 2009; Steiger 1979). Here, I will focus mainly on the latent factor model as the most measurement tool in psychometrics. Basically, a factor model estimated on a data set has an infinite number of solutions and can be produced by an infinite number of other data sets. The solution is not unique. The factors loadings are unique, but individual scores cannot be estimated without deviating from the initial assumptions. Thus the “truth” in the factor model is at an aggregate level represented as loadings that apply for the whole population, but individual true values cannot be estimated. The reason is that factor model estimates more parameters than observable variables (variables plus their errors), which is the same problem rooted in $M=T + E$ albeit elevated to a higher dimension. Factor analysis can reproduce successfully covariance matrixes, but it cannot uniquely reproduce individual scores without additional assumptions. Relatedly, Principal Component Analysis (PCA) can reproduce individual scores after dimensionality reduction, but its errors are not independent, which makes it an unpreferred method by social scientists, who want to strictly adhere to CTT. The price of PCA pays for its ability to reproduce individuals scores is an indeterminate correlational structure (Widaman 2018) making it unsuitable for testing relationships. Overall, both FA and PCA have indeterminacy issues that violate CTT (Vittadini 1989).

Finally, the factor model is suitable for reflective measures, where a latent variable causes the observed variables. However, not all concepts fit this pattern, and there are latent variables that are formed by its indicators (e.g., the perceived value of a car is formed by its age, brand reliability, etc.) The problem is that the two measures have different philosophies and operationalization methods, and formative measures cannot be measured independently and always require other measures in the model (Bagozzi, 2011). Thus, mental concepts themselves do not adhere to a single operationalization of “truth”.

Another related example where “truth” depends on the choice of the researcher is the choice between partial least squares (PLS) and covariance-based structural equation models (CB-SEM). PLS is effective in predicting the scores of the dependent variables, albeit without measuring error (Henseler et al. 2014; Henseler, Hubona, and Ray 2016; Rigdon 2012). PLS predictions in terms of scores can be related to individual people. On the other hand, CB-SEM is effective in fitting covariance structures, which is referred to as theory testing, and is applied strictly on group level. Although both modeling techniques are widely recognized they exemplify how results depend on the goal of the researcher, and not on an objective truth.

Overall, “true value” in psychometrics depends on the chosen operationalization. Although believed to be related to a real phenomenon, to justify the use of CTT, “true value” depends on the model and the choice of the researcher. “True value” is not unique in psychometrics.

Different Philosophies of Truth

Philosophically, there also are many theories of truth (Glanzberg 2018; Scharp 2013; and Walker 2017). Philosophers have long recognized that the truth can be formulated in different ways, and below is a quick summary of the most important theories:

- Correspondence Theory - Truth is when a statement matches or corresponds to reality (facts, states of affairs). Example: “Snow is white” is true if and only if snow is white.
- Coherence Theory - Truth is when a belief or proposition fits coherently within a system of interconnected beliefs, without internal contradiction.
- Axiomatic Theory (truth in formal systems) - Truth is defined within a formal system based on axioms; statements are true if derivable from axioms using the system’s rules (e.g., Euclidean geometry, formal logic).
- Pragmatism - Truth is what works in practice—what produces successful or useful outcomes when acted upon.
- Anti-Realism - Truth depends on our ability to verify or justify it, rather than on correspondence to an independent reality. Example: a statement can only be “true” if it’s possible, in principle, to establish it as such.
- Constructivist – Truth is constructed within social or conceptual frameworks.
- Pluralist – Different domains may require different notions of truth.

This makes interpreting truth in psychometrics even more complicated. Although psychometricians adhere to CTT, which forces them to accept the correspondence theory of truth, a careful juxtaposition shows that actually different theories of truth are utilized. Due to space constraints, I will not discuss the application of every theory in details and below is a summary of what theories of truth are utilized by the different measurement methods.

Table 1: Psychometric Method and Theories of Truth

Psychometric Method	Truth Theory	Rationale
Platonic Score (classical true score)	Correspondence	Assumes an objectively existing “true score” for each person/item; measurement is an attempt to approximate this fixed value, with error as deviation from it. This is a direct match to correspondence theory, where truth exists independently of our measurement and is discoverable in principle.
Lord & Novick (CTT)	Correspondence, some Coherence	Retains correspondence view of the true score, but adds formal statistical models that require internal consistency among observed scores and their expected values. Coherence enters because the truth claim (true score) is embedded in a structured system of relations among variables.
Generalizability Theory (Cronbach)	Pragmatism, Anti-Realism, some Coherence	Abandons a single universal true score; defines “truth” as dependable measurement for a specified decision purpose. Accepts that estimates depend on the measurement facets (occasion, rater, item). This is pragmatist (truth = usefulness) and partly anti-realist (truth exists only within a verification framework).
Latent Variable Theory (SEM)	Coherence, some Correspondence	Models latent variables to explain the covariance structure of observed indicators. Coherence is central — a good model fits the data structure. Correspondence appears when latent variables are interpreted as real-world causes.
Reflective Constructs	Correspondence	Indicators are assumed to be caused by a latent variable that exists independently of the measurement process. The construct’s “truth” lies in its independent existence and causal role.
Formative Constructs	Constructivism, Pragmatism	The construct is defined by its indicators — it does not pre-exist them. This makes it socially or conceptually constructed (constructivism), and its adequacy is judged pragmatically by how well it serves the research purpose.
PLS-SEM	Pragmatism, some Constructivism	Optimized for prediction and explained variance, not necessarily for discovering an independent underlying reality. Constructs can be reflective or formative, but the focus is on practical utility rather than ontological claims.
CB-SEM	Coherence, some Correspondence	Emphasis on overall model fit (coherence) with the option of realist interpretation if latent variables are treated as actual causes. In practice, often judged by statistical fit indices and theoretical plausibility.
Note: Coherence is viewed as internal consistency within a specified statistical model because most psychometric validation steps focus on model fit and internal consistency. It is difficult to verify global coherence across disciplines.		

It is plausible to conclude that different methods in psychometrics not only operationalize true value differently but they also utilize different theories of truth. At this point, it is unavoidable but to conclude that the “true value” according to $M=T + E$ can take different forms and its interpretation as unique becomes problematic.

From Classical Metrology to Modern Metrology

Natural sciences have experienced similar problems and the shift from classical metrology to modern metrology was driven by deep conceptual and practical needs due to the philosophical fragility of the classical “true value”.

Classical metrology is based on CTT and $M=T + E$. It was exceptionally useful in advancing science for decades but there were three main issues with it. First, it was recognized that the uniqueness of true value was not

realizable because it is a model idealization. Anything subjected to measurement does not have definable unique properties in an absolute sense. Consider measuring the diameter of a manufactured cylinder: the model assumes that the cylinder is a perfect circle, but there always are manufacturing imperfections preventing the production of a perfectly round cylinder. As UNI-UNIPREA 4546 (1984) states: "No parameter in a system can be measured with vanishing uncertainty; the uncertainty affecting a measurement does not depend only on the measuring method, but contains a portion intrinsically connected with the definition of the specific parameter". This is what modern metrology recognizes as definitional uncertainty, which prevents the absolute definition of a measurand (i.e., the quantity intended to be measured) with a finite amount of information. Therefore, "true value" is unrealizable in practice, and therefore the correct estimation of error is unrealizable as well.

Second, it is not possible to calculate all possible sources of error. In theory, random error can be evaluated as the standard deviation of the distribution of infinite number of repeated measurements. The observed distribution may be different from the final theoretical distribution and there is no way of finding that out. Such difference can become more pronounced when multiple types of measurements are considered. Therefore, it is impossible to identify all sources of systematic error (Ehrlich, Dybkaer, and Wöger 2007).

Finally, there was no statistical way to combine systematic and random errors into a single expression. While random errors could be represented by distributions (usually Gaussian) and later combined through error analysis, systematic errors do not follow a known distribution. Systematic errors can arise from within- and inter-lab measurements and there is limited information about them. In general, systematic errors are not random and are unobservable, for which "conventional statistics fails utterly" (Lira and Wöger 2006, p. S253). There is no population behind systematic error and therefore there is no sample for it in order to represent it as a random variable in a classical sense (Bich 2012).

These issues lead to modern metrology, which departs from "true value" and introduces uncertainty. The change started in the late 1980s and culminated with the finalization of the Guide to the Expression of Uncertainty in Measurement (GUM), (JCGM 100 2008). Another important document, which aims at standardizing the measurement principles and concepts across disciplines and metrology bodies is the International Vocabulary of Basic and General Terms in Metrology, 3rd edition (VIM3), (JGCM 200 2008). Together, these documents cover the bases of measurement in natural sciences. Probably the most important element of modern metrology is "true value" was substituted with a set of true values consistent with the definition of the measurand. Therefore, it is the definition of a measurand that plays a leading role not the idealized concept of true value. Realizing that true value could not be known in principle lead to heated debates in metrology whether the concept of truth was even needed. As one of the authors of GUM recalls, during the early years the concept of true value was subjected to strong criticism, and "the very terms were almost banned from the literature, and whoever dared to use them was considered suspiciously as a supporter of old ideas" (Bich 2012, p.2156). Some current standards, like IEC 60359 (2001), go as far as treating "true value" as unknowable and unnecessary, and see the objective of measurement as only providing metrological compatibility of measured results. This is a pragmatic approach rooted in epistemology, where the assumption is that because true is unknowable, the best that can be done is to guarantee consistency of measurement instruments. The IEC position is that "the concept of true quantity value is potentially harmful, since it leads to thinking about something that is not relevant" (Ehrlich, Dybkaer, and Wöger 2007, p. 213).

The purpose of measurement then becomes obtaining results as a range of values consistent with the definition of the measurand. The measurand is a random variable dependent on human activity and therefore viewed as a state of knowledge. It is estimated using Bayesian statistics. Uncertainty is understood as lack of knowledge or incomplete information and it is generally decomposed into statistical uncertainties (the former random error) and systematic effects, plus sources of information, or scientific judgments. All uncertainties are combined through the measurement function of the measurand using error analysis.

Modern metrology has a more complicated statistical apparatus and the above description only scratches the surface, but it is enough to communicate the main changes. From here, it is possible to transition back to psychometrics and recommend a different approach for measurement.

Losing the True Value in Psychometrics

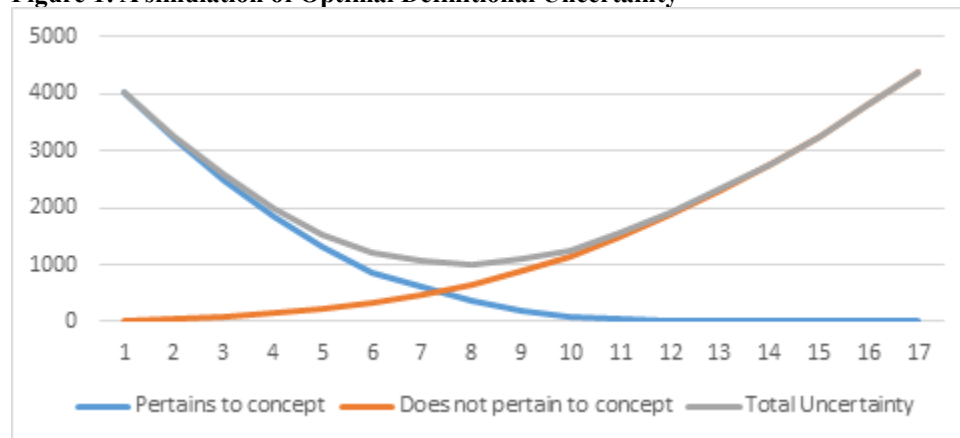
How can psychometrics adapt to modern metrology? There are two important implications: true score should not be the goal of measurement; and second, there is a need to develop a methodology for defining the measurand.

It may be difficult to convince social scientists that measurement is possible without error and true value, but it is possible. This should not be perceived as departing from pursuing truth, but rather as finding the scientific truth in a different way. “True value” in measurement and truth in science are two different things. The goal is to avoid multiple operationalizations of truth in psychometrics. The new anchor points will be the definition of the measurand and obtaining uncertainty for every measure.

In the past, definitions did not play substantial role in psychometrics, as it was assumed that the statistical methods would purify the measures by minimizing the “errors”. The new approach however, relies thoroughly on a establishing a strong definition of the measurand. The quality of definition will be evaluated by definitional uncertainty. It is expected that the definitional uncertainty in natural sciences will be amplified in social sciences because many concepts have vague meanings. For example, concepts like wellbeing, customer loyalty, democracy, etc., may have different meanings across people. The problem of defining precisely mental concept has been researched in psychology but never applied to measurement. Even anecdotal evidence suggests that achieving a complete definition for a mental concept is impossible. Consider the concept of a chair: there is no one definition that can encompass all possible chairs (dining, office, modern, artsy, etc.), and not all chairs can fit a single definition. This is an example of the vagueness of mental concepts, but the new proposition here is that their definitional uncertainty can be evaluated.

Here is how it can work. A concept intended for measurement can be decomposed into different subcomponents and rated by people to what degree each of these components are perceived to pertain to the concept. The components will be ordered in a descending order. As Figure 1 illustrates, when we start adding subcomponents to the definition there are two types of errors: error due to not including subcomponents perceived by some as pertaining to the concepts and error from including components perceived by some as not pertaining to the concepts. It can be proven that the sum of the two errors will always have a minimum point, which will indicate the minimum definitional uncertainty of the concept. It is exactly that definition that will be accepted to describe the concepts.

Figure 1: A simulation of Optimal Definitional Uncertainty



Next, for measurement purposes on surveys, each concept will be represented through this optimal definition on a survey. Respondents will be asked to provide an answer on a single scale using an interval. Usually, respondents pick a specific point on a scale, but under this approach they will be allowed to select an interval. For example, if a respondent is uncertain, instead of selecting a 3, they can mark an interval from 2-4.

These two steps: acquiring an optimal definition that minimizes the definitional uncertainty and obtaining an interval capturing the uncertainty of every respondent are consistent with modern metrology. Of course, this will require a different statistical apparatus using error analysis, where intervals (not point estimates) are propagated through all statistical analyses. However, the benefit is that psychometrics will be aligned with modern metrology, will be using the same vocabulary and statistics.

This is a radical new direction that may face resistance or at least difficulty of getting accepted but it is a more sustainable path than maintaining the plethora of the multiple operationalizations of a “true value” that is hard to prove to exist and is based on a belief. The new approach is epistemological and presents findings that are comparable.

References

- Anderson, Theodore W. and Herman Rubin (1956), “Statistical inference in factor analysis,” in *Proceedings of the third Berkeley symposium on mathematical statistics and probability*, 111–50.
- Bich, Walter (2012), “From Errors to Probability Density Functions. Evolution of the Concept of Measurement Uncertainty,” *IEEE Transactions on Instrumentation and Measurement*, 61 (8), 2153–59.
- Blanton, Hart and James Jaccard (2006), “Arbitrary metrics in psychology,” *American Psychologist*, 61 (1), 27–41.
- Bollen, Kenneth A. (2002), “Latent variables in psychology and the social sciences,” *Annual review of psychology*, 53 (1), 605–34.
- Bringmann, Laura F. and Markus I. Eronen (2016), “Heating up the measurement debate: What psychologists can learn from the history of physics,” *Theory & Psychology*, 26 (1), 27–43.
- Cronbach, Lee J., Goldine C. Gleser, Harinder Nanda, and Nageswari Rajaratnam (1972), *The Dependability of Behavioral Measurements: Theory of Generalizability for Scores and Profiles*, New York: John Wiley & Sons.
- Ehrlich, Charles, René Dybkaer, and Wolfgang Wöger (2007), “Evolution of philosophy and description of measurement (preliminary rationale for VIM3),” *Accreditation and Quality Assurance: Journal for Quality, Comparability and Reliability in Chemical Measurement*, 12 (3), 201–18.
- Ferguson, A., C. S. Myers, R. J. Bartlett, H. Banister, F. C. Bartlett, W. Brown, and W. S. Tucker (1940), “Final report of the committee appointed to consider and report upon the possibility of quantitative estimates of sensory events,” *Report of the British Association for the Advancement of Science*, 2, 331–49.
- Finkelstein, Ludwik (2003), “Widely, strongly and weakly defined measurement,” *Measurement*, 34 (1), 39–48.
- Glanzberg, Michael (2018), “Truth,” in *The Stanford Encyclopedia of Philosophy*, E. N. Zalta, ed., Metaphysics Research Lab, Stanford University.
- Henseler, Jörg, Theo K. Dijkstra, Marko Sarstedt, Christian M. Ringle, Adamantios Diamantopoulos, Detmar W. Straub, David J. Ketchen, Joseph F. Hair, G. Tomas M. Hult, and Roger J. Calantone (2014), “Common Beliefs and Reality About PLS: Comments on Rönkkö and Evermann (2013),” *Organizational Research Methods*, 17 (2), 182–209.
- Henseler, Jörg, Geoffrey Hubona, and Pauline Ash Ray (2016), “Using PLS path modeling in new technology research: updated guidelines,” *Industrial Management & Data Systems*, 116 (1), 2–20.
- IEC 60359 (2001), “Electrical and Electronic Measurement Equipment – Expression of Performance.”
- JCGM 100 (2008), “Guide to the expression of uncertainty in measurement (GUM 1995 with minor corrections).”
- JGCM 200 (2008), “International Vocabulary of Metrology – Basic and General Concepts and Associated Terms (VIM).”
- Klein, Donald F. and T. Anne Cleary (1967), “Platonic true scores and error in psychiatric rating scales,” *Psychological Bulletin*, 68 (2), 77–80.

- Klein, Donald F. and T. Anne Cleary (1969), "Platonic true scores: Further comment," *Psychological Bulletin*, 71 (4), 278–80.
- Lira, Ignacio and Wolfgang Wöger (2006), "Comparison between the conventional and Bayesian approaches to evaluate measurement data," *Metrologia*, 43 (4), S249–59.
- Lord, Frederic M. and Melvin R. Novick (1968), *Statistical theories of mental test scores*, Reading MA: Addison-Wesley Publishing Company.
- Lumsden, J (1976), "Test Theory," *Annual Review of Psychology*, 27 (1), 251–80.
- Mari, Luca, Valentina Lazzarotti, and Raffaella Manzini (2009), "Measurement in soft systems: Epistemological framework and a case study," *Measurement*, 42 (2), 241–53.
- Maul, Andrew, David Torres Irribarra, and Mark Wilson (2016), "On the philosophical foundations of psychological measurement," *Measurement*, 79, 311–20.
- Michell, Joel (2013), "Constructs, inferences, and mental measurement," *New Ideas in Psychology*, 31 (1), 13–21.
- Mulaik, Stanley A. (2009), *Foundations of factor analysis*, CRC press.
- Rigdon, Edward E. (2012), "Rethinking Partial Least Squares Path Modeling: In Praise of Simple Methods," *Long Range Planning*, 45 (5–6), 341–58.
- Rossi, Giovanni B. and Birgitta Berglund (2011), "Measurement involving human perception and interpretation," *Measurement*, 44 (5), 815–22.
- Rossi, Giovanni Battista (2007), "Measurability," *Measurement*, 40 (6), 545–62.
- Scharp, Kevin (2013), *Replacing truth*, OUP Oxford.
- Shavelson, Richard J., Noreen M. Webb, and Glenn L. Rowley (1989), "Generalizability theory," *American Psychologist*, 44 (6), 922.
- Steiger, James H. (1979), "Factor indeterminacy in the 1930's and the 1970's some interesting parallels," *Psychometrika*, 44 (2), 157–67.
- Stevens, S. S. (1959), "Measurement psychophysics and utility," in *Basic concepts of measurement*, Cambridge, MA: Cambridge University Press.
- Sutcliffe, J. P. (1965), "A probability model for errors of classification. I. General considerations," *Psychometrika*, 30 (1), 73–96.
- Toomela, Aaro (2008), "Variables in Psychology: A Critique of Quantitative Psychology," *Integrative Psychological and Behavioral Science*, 42 (3), 245–65.
- Trendler, Günter (2009), "Measurement Theory, Psychology and the Revolution That Cannot Happen," *Theory & Psychology*, 19 (5), 579–99.
- UNI-UNIPREA 4546. (1984), "Misure e misurazioni: termini e definizioni fondamentali (Fundamental terms and definitions in measurement, Italian Standard)," Torino.
- Vittadini, Giorgio (1989), "Indeterminacy problems in the Lisrel model," *Multivariate Behavioral Research*, 24 (4), 397–414.

Walker, Ralph C. S. (2017), "Theories of Truth," in *A Companion to the Philosophy of Language*, John Wiley & Sons, Ltd, 532–55.

Webb, Noreen M., Richard J. Shavelson, and Edward H. Haertel (2006), "4 reliability coefficients and generalizability theory," *Handbook of statistics*, 26, 81–124.

Widaman, Keith F. (2018), "On common factor and principal component representations of data: Implications for theory and for confirmatory replications," *Structural Equation Modeling: A Multidisciplinary Journal*, 25 (6), 829–47.

Summary Brief

Implicit Donations: How Belief in a Just World Fosters Charitable Behavior to Support For-Profit Businesses through Dignity Promotion

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Alessandra Lisanti, University of Wyoming, USA

Every day consumers make purchases of goods and services to support businesses. Based on this context, this article introduces the concept of implicit donations, defined as acts of charity masked as genuine interest in the offerings of a beneficiary. In this research, we demonstrate that, at the core of this particular kind of prosocial behavior, there is a consumer's belief in a just world. Consumers who believe that a beneficiary deserves success are more likely to engage in this form of charitable giving. Believing in a just world leads consumers to desire to promote the dignity of the beneficiary, which then fosters implicit donation behavior. The concept of implicit donations is relevant because it underscores that charitable giving extends beyond traditional donation contexts.

References available upon request.

SESSION 33.8: TEACHING MOMENTS SESSION I

Moderators:

Michelle Sullivan

Jen Riley

Teaching Moment

Three High-Impact Engagement Tools for Online Courses

Ream Shoreibah, University of Alabama at Birmingham, USA

Background

Since 2017, enrollment in higher education has decreased by about five percent (Aslanian and Fischer 2024). Despite this decline, online education enrollment has increased by about 90 percent in the same period, and about 30 percent of college students in 2024 were enrolled exclusively online (Aslanian and Fischer 2024). It is no surprise, then, that despite widespread budget cuts, 42 percent of higher education institutions increased their online learning budgets in 2024 (Hanover 2025). Of note, more students (23 percent of those taking online courses) study Business online than any other discipline (Aslanian and Fischer 2024). Despite this growth, students report feeling isolated in online courses, and instructors are constantly on the hunt for ways to better engage students (Kordrostami and Seitz 2022). Outlined here are three high-impact tools to address this issue.

Tool 1: The Weekly Video Announcement

Short weekly videos recorded by the instructor can reduce feelings of isolation, especially in asynchronous online courses. These videos typically serve as informal previews of the upcoming week and help build instructor presence, inject energy into the course, and establish a more personal connection with students. They can highlight deadlines, clarify weekly goals, share course-related updates, or even spotlight particularly strong contributions from past work. Instructors can also use them to respond to common student questions or clarify confusing material. An informal, friendly, and direct style resonates with students, making the instructor feel more accessible and invested. Production quality is not a barrier, as long as audio quality is satisfactory. Simple recordings from a phone are sufficient and often more authentic. These videos are typically two to four minutes long and are posted at the start of each week. Over time, students begin to look forward to the weekly videos as a predictable, encouraging touchpoint.

Tool 2: The Assignment Recap

When instructors grade a major assignment, students naturally want to understand how they did, where they stand relative to expectations, and what they should do differently next time. One way to meet this need is to provide a general post-assignment recap. Not only is this approach more efficient than providing lengthy comments on each individual assignment (which certainly have their utility and place), but it serves to create a sense of community by creating a shared learning experience. Instructors can use the recap to discuss common errors, highlight strong approaches (even quoting examples and referencing students by name), reinforce key concepts, and correct misinterpretations. This helps improve future performance and shows students that the instructor is closely reviewing their work.

Tool 3: The Mini-Lecture

Although many online classes rely on textbook chapters, discussion boards, and publisher-provided materials, students want to learn the material directly from their own instructors, and not necessarily through lengthy slide-and-talking-face videos. Instead, short “mini-lectures” can highlight or clarify key concepts. These videos are typically under ten minutes and focus on one core topic per video. An effective mini-lecture is conversational and targeted. For example, an instructor might introduce the various market segmentation criteria or explain the product life cycle. Over time, the mini-lectures become a library of sorts, both for the students and for the instructor’s future use.

References

Aslanian, C. B., & Fischer, S. (2024). Online College Students 2024: 13th Annual Report on the Demands and Preferences of Online College Students. Education Dynamics.

Hanover Research. (2025). 2025 Trends in Higher Education. Hanover Research, Arlington, VA.

Kordrostami, M., & Seitz, V. (2022). Faculty online competence and student affective engagement in online learning. *Marketing Education Review*, 32(3), 240–254.

Teaching Moment

From Zero to AI Hero: Build Your Class AI Tutor in 15 Minutes!

Holly A. Syrdal, Texas State University, USA

An AI tutor designed specifically for a particular marketing course can offer students personalized, on-demand support that reinforces core concepts and keeps pace with the fast-changing marketing landscape. Because marketing education blends theory with rapidly evolving industry practices, students benefit from a resource that not only explains foundational topics but also integrates current trends and practical applications. Such a tutor can adapt to different learning styles, provide timely feedback, and promote active engagement beyond scheduled class time (Grewal et al., 2025). By incorporating real-world examples and guiding students through applied exercises, an AI tutor can help bridge the gap between theory and practice, cultivating the critical thinking and problem-solving skills students need for professional success (Richter et al., 2024).

Marketing educators can easily create AI tutors for their courses by developing custom GPTs within ChatGPT. While a paid ChatGPT account is required to build the custom GPT, students can access and use the AI tutor without needing a paid subscription. In this Teaching Moment presentation, the audience will see how a custom GPT can be created in under 15 minutes to serve as a course-specific tutor. Strategies for defining the tutor's role, as well as customizing its tone and interaction style will be highlighted. Importantly, attendees will learn how to upload their own course materials, such as slides, notes, and exams, so the tutor can provide responses that are accurate, relevant, and aligned with the course structure.

References

- Grewal, D., Guha, A., Saturnino, C. B., & Becker, M. (2025). The future of marketing and marketing education. *Journal of Marketing Education*, 47(1), 61–77. <https://doi.org/10.1177/02734753241269838>
- Richter, S., Giroux, M., Piven, I., & Dodd, P. (2024). A constructivist approach to integrating AI in marketing education: Bridging theory and practice. *Journal of Marketing Education*. <https://doi.org/10.1177/02734753241288876>

Teaching Moment

15-minute Individual Student Discussions

Matthew Lunde, University of Minnesota Duluth, Duluth, MN, USA

Does anyone have trouble with student participation and discussion? Do you have issues with learning student names? When a job gets sent to you, do you know which student would be best for the job? To answer those questions, I complete a 15-minute “Visit” with each student at the beginning of each semester. We discuss the students’ goals, what they want in class, any questions they may have, any accommodation they need, and their long-term goals. This way, I learn students’ names, they get to know me better, they are more open to discussion in class, and they perform better.

Teaching Moment

Beat Me and You Get an A

Raj Srivastava, Middle Tennessee State University

One of the classes that I teach is Social Media Marketing class. One of the assignments is to make content for two social media apps or platforms. They can pick any two apps, and they must create content for both platforms. I count total views and likes at the end of the allocated time. As social media content creation is the basis of every social media strategy. This enables them to come up with exciting ideas

During the semester, I also make the content and post it on social media apps. So basically, I am doing the exact same assignment as they are doing. One open challenge I have is if you beat my number of views, then you will get A. No conditions needed.

This becomes an exciting challenge for students and if they do beat me then it is fair that they get an A and its becomes a memory of I.

Teaching Moment

Use of Promotional Objectives to Create an Advertisement Using AI for Plenty.Ag

Sujata Ramnarayan, Santa Clara University, USA

The impact and use of AI are increasing across industries, and many companies now expect employees to be comfortable using AI tools. In education, it is imperative to teach students how to use AI without short-circuiting the learning process. The purpose of this assignment is to help students understand the concept of promotional objectives and apply that understanding by creating a video advertisement using an AI tool. This assignment emphasizes the importance of value, target market, and market context in determining promotional objectives and crafting an effective promotional message. The integration of AI highlights the need for a solid grasp of key marketing concepts to implement them effectively. Students are provided with a brief description of a company and are tasked with applying the concepts of target market, value proposition, market context, and promotional objectives to develop a scripted video advertisement using an AI tool.

Students are instructed to select - one of the three promotional objectives - to inform, persuade, or remind - and use it to guide the messaging of the advertisement. This exercise is designed to reinforce the role of promotional objectives and connect them to broader marketing principles such as value creation, audience targeting, and the product life cycle.

Assignment Instructions

Using the example provided on Cultivated Meat (see Figure 1 and familiarize yourself with related articles in the References section), you are required to create a video advertisement using AI for Plenty.Ag (see website under References). In your advertisement, consider the market situation, target market, and your selected promotional objective—to inform, persuade, or remind. A sample is provided (Figure 1: Cultivated Meat) to guide you through the process.

Company Overview:

Plenty.Ag is an agtech company that uses technology to grow fresh produce such as lettuce and strawberries. Their farming practices are sustainable, using technology, less water, and avoiding the need for valuable land through the practice of vertical farming indoors. Their produce is fresher due to its proximity to retail stores and its urban location. This brings new meaning to the term “farm to table.”

Approach to Complete the Assignment

1. **Identify Key Value:** Based on the company description, determine the **core value proposition** of Plenty.Ag. Consider your **target market** and what aspects of this value you want to emphasize in your promotional messaging—and **why**.
2. **Define Your Promotional Objective:** Choose **one** promotional objective: to **inform**, **persuade**, or **remind**. Justify your choice based on the current **market situation**, the **product life cycle stage**, and the **nature of your target market**.
3. **Develop Your Video Message:** Describe your promotional objective and explain how it relates to your chosen **target market**, the company's **value proposition**, the stage of the product in its **product life cycle**, and your intended message using a story format as described in step 4. For example, the intended message in provided example on Cultivated Meat focuses on helping the target market overcome guilt experienced when eating meat. Then, this message is developed using a story as a script for the video.
4. Write a **scripted story** for a 30-second to 1-minute video using the classic narrative structure:
 - **Problem → Conflict → Resolution**

For example: *Bad breath (problem) causes social anxiety (conflict); Listerine mouthwash provides a solution by making breath smell fresh (resolution)*. Your story should reflect your promotional objective. For example, if the goal is to **inform**, the message should be **educational** providing information that you think the customer does not know.

5. **Create the Video with AI:** Edit your script by thinking frame by frame—each sentence becomes a visual or message cue in the AI-generated video. Use [Pictory.ai](#) to input your script and automatically generate a video. Use the platform's tools to add narration, emphasis, adjust scenes, edit text, and more, using the provided guide.
6. **Submit Your Work:** Upload a document with your responses to **Questions 1–3**. Download the completed video, process it, and **include the video link** in the submitted document.

Cultivated Meat Example Scenario

Step 1: Situation, Target Market, Promotional Objective, Basic message structure

Market Situation: Cultivated meat is lab grown meat, grown from cells of the animals. It is more sustainable as it reduces carbon emissions and the inhumane nature of industrial meat farming. Consumers likely to be interested are those who are concerned about the environment and/or about cruelty to animals and like meat but eat less of it or avoid it for ethical reasons.

Target market: Those who want to eat meat but care about the environment/ cruelty to animals

Promotional Objective: Persuade to change attitude/behavior

Problem: Want to eat meat but feel guilty about not caring about animal cruelty/envt

Solution: Cultivated meat /character (product, person, animals)

Resolution: Feel good about yourself, envt, and still eat meat

Script

Every year thousands of **animals** are **slaughtered** in **inhumane** conditions.

Every year **industrial farming** contributes to carbon **emissions**.

This is **bad** for the **environment**

Eating meat should not make you feel bad about your choices

Lab grown meat is real meat but

-it is grown **sustainably**

And tastes as good

The Good Meat –

be good to yourself and

to the **planet**

Process

Create a script (Each line is a scene)

Let AI create the initial video based on the script in Pictory.AI

Click on guide to add narration, change scene, edit text, AI voiceover or your own, and more.

Click on preview: When satisfied, click on download to process, watch video using link provided. If satisfied, right-click and save as MP4 to upload video.

Additionally provide text with description as outlined on the assignment instructions on Camino.

Figure 1: Example Process on Cultivated Meat (Cultivated meat is a cell-based meat that is grown in the lab that tastes like meat, is meat, but is more sustainable) – [Example video](#)

References:

- Baker, D. (2010, March 19). Vertical farms have nailed leafy greens: Next up, tasty fruit. Wired.
<https://www.wired.com/story/the-produce-company-that-supplies-google-hqs-kitchen/>
- Plenty. (n.d.). Home. Plenty. Retrieved July 18, 2025, from <https://www.plenty.ag/>
- Watson, E. (2022, November 16). FDA clears California company's lab-grown chicken as safe to eat. The Wall Street Journal. <https://www.wsj.com/articles/fda-clears-california-companys-lab-grown-chicken-as-safe-to-eat-f0f201ec>

Teaching Moment

Brand Matchmakers: Pairing Companies with Their Corresponding Slogan

Michelle Woodhouse, Flagler College
Alicia Cooper, Alabama A&M University

This interactive classroom activity works well in any marketing course covering branding. It is designed to help students understand the importance of branding and examine how different elements such as the brand name, brand mark, and slogan work together to build brand equity. This experiential exercise engages students in a hands-on, memorable experience that highlights the power of brand recognition and the varying effectiveness of brand elements.

The activity begins with an even number of participants. If there is an odd number, one student serves as the teacher's assistant. On separate note cards, the name of a company is written on one card and the corresponding slogan on another. Enough cards are prepared so there is one pair for every two students. The cards are shuffled and distributed, one per student. Each student therefore receives either a notecard with the name of a company or a slogan.

Students have five minutes to circulate around the room to find their "perfect match". Each company card must be paired with its corresponding slogan. If a student does not recognize the slogan, they may request an additional clue, the brand mark. Once all matches are made, pairs spend two minutes discussing whether they recognized the slogan, the brand mark, or both, as well as the emotional connection that the company strives to build with its customers.

For the final challenge, the class participates in a bonus round. Students, working in small teams, see either the brand mark or the slogan of a lesser-known brand and work together to identify the company. They then explain the reasoning behind their choice. This round encourages students to think critically about how familiarity, repetition, and exposure influence the way consumers identify and recall brands.

The activity concludes with a class discussion about the importance of branding, the effectiveness of each brand element, and strategies companies use to develop a strong brand. When this activity was implemented, we surprisingly found that while students easily recognized popular companies by their brand marks, many could not recall slogans, even for brands they were loyal to, such as Apple. This insight led to a lively discussion about how brands communicate their identity and how consumers perceive those messages.

Teaching Moment

From Market Segment to Buyer Persona

Alicia D. Cooper, Alabama A&M University, USA
Michelle Woodhouse, Flagler College, USA

This assignment is designed to help students understand the relationship between a market segment and a buyer persona. Students are given a market segment description and must use this information to create a buyer persona for a consumer in that segment. A Generic Buyer Persona example, as well as a Buyer Persona Template are provided to students.

Instructions to Students

Circle at least 4 characteristics below (on the market segment description) that you will use in creating your persona.

Market Segment Description:

Elderly Black Consumers with conditions such as heart disease or diabetes. They need pain medicine that won't interfere with their prescription meds.

DEMOGRAPHIC CHARACTERISTICS	THEIR PASSIONS & VALUES	HOW TO CONNECT WITH THEM
• Average Age – 62 • 40% Male/ 60% Female • Lives in Southern US • Mostly Divorced or Separated • Shops at Value Stores	• “I want to make sure I’m around to enjoy my grandkids” • Take medicine at 1st sign of pain • Have regular medical checkups • Important to attend religious services • “My faith is important to me” • Watch BET, OWN networks	• Enjoy Gospel music • Enjoy R&B music • Listen to the radio • “Football Sundays are my favorite days—filled with good food and family” • Watch College Football • Watch NFL Pre-Show • “I may be getting older, but I won’t be left behind” • Comfortable Registering on Health website

Using the Information on the above sheet (the market segment description), create a buyer persona for one fictional consumer in this market segment.

Categories on Buyer Persona Template:

Persona Name & Description

Age

Gender

Hometown

Education

Job Title (if working)

Social Media Use

Goals

Challenges

Needs

**SESSION 33.9 PANEL: DIGITAL PARENTING
ROUNDTABLE: UNTANGLING THE MARKETPLACE
OF CHILDREN'S DIGITAL CONSUMPTION**

Panelists:

Kelley Cours Anderson

Brittany Beck

Scott Cowley

Alexa Fox

Ashley Hass

Breanne Mertz

Karen Wallach

SESSION 33.10: PROSOCIAL CUES, RELATIONSHIP REPAIR, AND PERCEIVED AGE

Moderators:

Cathedral Zeyeh

Summary Brief

Dieting and Physical Activity: Do They Impact Cognitive Age?

Timothy H. Reisenwitz, Valdosta State University, USA

Consumers continue to strive to feel younger than their chronological ages, which impacts their spending behavior, particularly in the wellness sector. This study examined the effect of dieting and physical activity on the cognitive age of senior consumers. More specifically, do consumers feel younger as a result of engaging in dieting and physical activity? Two generational cohorts, Baby Boomers and Generation X, were profiled in this study and assessed in terms of their emphasis on dieting and physical activity and how these affected their cognitive age. A hard-copy questionnaire was designed with demographic, ordinal, and psychographic scales. Results showed that Baby Boomers engaged in high levels of dieting and physical activity reported significantly lower cognitive ages. In contrast, findings did not reflect the same for Generation X, although the means were in the hypothesized direction. Theoretical and practical contributions were presented.

Introduction

The global mature segment is large and will continue to grow (Badham, Taheri, Magistro, Grant, May, & Goddard, 2024). Better health care and greater discretionary incomes than in the previous century have made older generational cohorts, Baby Boomers and Generation X, more important (Van Auken, Barry, & Bagozzi, 2006). This phenomenon provides a setting for examining and testing the construct called cognitive age as it relates to dieting and physical activity.

Cognitive age, also referred to as subjective age (Rubin & Berntsen, 2006) or felt age (Bergland, Nicolaisen, & Thorsen, 2014), is a construct in which one is as old as one feels, with research findings supporting that older consumers may feel at least 10 years younger than their chronological age (Amatulli, Peluso, Guido, & Yoon, 2018; Barak & Schiffman, 1981; Van Auken et al., 2006). Many older consumers do not perceive themselves to be old (Spinks, 2017). Importantly for marketers, studies have found that cognitive age may be a better predictor of consumer behavior than chronological age (Spinks, 2017; Van Auken et al., 2006; Sherman, Schiffman, & Dillon, 1988). Therefore, marketing strategies directed toward older consumers that do not consider cognitive age may result in ineffective targeting, poor positioning, and ultimately failure (Spinks, 2017).

Furthermore, improvements in health care, including the emphasis on dieting/nutrition and exercise, have increased life expectancy and quality of life for many older consumers (Majumder, Aghayi, Nofereesti, Memarzadeh-Tehran, Mondal, Pang, & Deen, 2017). However, older consumers are still at risk for poor health due to their sedentary lifestyles (Sullivan & Lachman, 2017).

H1: Baby Boomers engaging in vigorous dieting have a lower cognitive age than Baby Boomers engaging in light dieting. (supported)

H2: Generation Xers engaging in vigorous dieting have a lower cognitive age than Generation Xers engaging in light dieting. (not supported)

H3: Baby Boomers engaging in vigorous physical activities have a lower cognitive age than Baby Boomers engaging in light physical activities. (supported)

H4: Generation Xers engaging in vigorous physical activities have a lower cognitive age than Generation Xers engaging in light physical activities. (not supported)

The following hypothesis is proposed to confirm that there are no major differences between generational cohorts regarding their concern toward the reduction of risks to their health, thus supporting the similarly structured previous hypotheses for Baby Boomers and Generation X:

H5: There are no significant differences between Baby Boomers and Generation X regarding their behaviors to reduce health threats. (supported)

Discussion

There were theoretical and practical implications in this study. The methodology included the use of existing scales for cognitive age and behaviors that reduce health threats. This study designed two complementary five-point ordinal-level scales to assess the levels of dieting and physical activity of the respondents.

There were implications for the marketing practitioner as well in terms of segmentation. Estrada, Monferrer, Moliner, and Sanchez (2014) note that, for effective segmentation, firms should consider cognitive age in addition to chronological age. For example, consumers who feel younger than their chronological age tend to be attracted to sustainable products. They perceive a match between their youthful self-image and the values associated with sustainability (Lee & Kim, 2024).

In particular, this study provided segmentation guidelines via dieting and physical activity levels among older consumers. Although the results for Baby Boomers were significant, they were not for Generation X. The reason for this may be, in part, that due to their greater ages, Baby Boomers are engaging in more serious dieting and physical activities in order to stay and feel younger. Generation X may not have reached the point in their lives at which a focus on dieting and physical activity is very important. Therefore, marketers of aerobic exercise (cardio), strength training, and balance and flexibility exercises for older consumers may best direct their promotion toward Baby Boomers with lower cognitive ages. Similarly, marketers of high-protein, low-calorie dieting programs and supplements directed toward older consumers may best target their efforts toward the Baby Boomers group with lower cognitive ages.

References

- Amatulli, C., Peluso, A. M., Guido, G., & Yoon, C. (2018). When feeling younger depends on others: The effects of social cues on older consumers. *Journal of Consumer Research*, 45(4), 691-709. <https://doi.org/10.1093/jcr/ucy034>
- Badham, S. P., Taheri, B., Magistro, D., Grant, N., May, N., & Goddard, A. (2024). Health and fitness marketing appeals to older consumers. *The Service Industries Journal*. DOI: 10.1080/02642069.2024.2355255
- Barak, B. & Schiffman, L. G. (1981). Cognitive age: A nonchronological age variable. *Advances in Consumer Research*, 8, 602-606.
- Bergland, A., Nicolaisen, M., & Thorsen, K. (2014). Predictors of subjective age in people aged 40-79 years: A five-year follow-up study. The impact of mastery, mental and physical health. *Aging & Mental Health*, 18(5), 653-661. <https://doi.org/10.1080/13607863.2013.869545>
- Estrada, M. M., Monferrer, D., Moliner, M. A. & Sanchez, J. (2014). Attitudes toward ads and age: A study in seniors. *Brazilian Journal of Marketing*, 13(3), 1-16.
- Lee, D. C., & Kim, J. (2024). Feeling younger and acting greener: The impact of subjective age on sustainable consumption. *Psychology & Marketing*, 41, 2310-2328. DOI: 10.1002/mar.22059
- Sherman, E., Schiffman, L. G., & Dillon, W. R. (1988). Age gender segments and quality of life differences. In *Marketing: A return to the broader dimensions*. Eds. Stanley Shapiro and Alf H. Walle. Chicago: American Marketing Association, 319-320.
- Spinks, W. (2017). The influence of cognitive age versus chronological age on customer satisfaction in the health sector. *e-Journal of Social & Behavioural Research in Business*, 8(1), 106-113.
- Sullivan, A. N., & Lachman, M. E. (2017). Behavior change with fitness technology in sedentary adults: A review of the evidence for increasing physical activity. *Frontiers in Public Health*, 4(289), 1-16. <https://doi.org/10.3389/fpubh.2016.00289>

Van Auken, S., Barry, T. E., & Bagozzi, R. P. (2006). A cross-country construct validation of cognitive age. *Journal of the Academy of Marketing Science*, 34(3), 439-455.

**SESSION 34.1 PANEL: INFLUENCER MARKETING
EDUCATION: ENGAGING STUDENTS WITH
INFLUENCER DATABASES AND CASES**

Panelists:

Scott Cowley

Brittany Beck

SESSION 34.2: HIGH SCORE, LOW ODDS: BEATING THE UNCANNY AT THE NEON ARCADE

Moderators:

Adam Powell

Summary Brief

Addicted to Gaming: Examining Vividness, Social Presence, and Flow State in Video Game Experience

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Mohammad Rahman, Shippensburg University of Pennsylvania, USA

Video games have become an integral and ever-expanding component of the experience economy, shaping the entertainment landscape and influencing cultural trends in many developed countries. Beyond entertainment, they are drivers of social interaction, technological innovation, and economic growth. Video games can also elicit addiction. Although video game addiction is a known disorder, research on the antecedents of addiction in video game design are in their early stages and deserve further academic treatment. This research examines vividness, social presence, and flow state in their relationship to one another and video game addiction. A study of 201 video game players shows vividness and social presence both positively relate with video game flow and addiction. Flow state is a stronger predictor of addiction in this study, indicating that although flow may be a worthwhile marker of the immersiveness of the video game design, addiction may be an unintended negative outcome.

Introduction and Hypothesis Review

Video games have developed in diverse and meaningful ways since they were first commercialized. As technology advances, so have the capabilities of video games and the ways and means by which they are played and consumed. These advances in video games have also enabled enhanced video game immersion, even to the point of virtual reality, which experientially removes players from their physical reality. Video games can facilitate psychological escape, skill development, goal achievement, and immersive entertainment. Video games are a notable part of the experience economy. In this study we examine vividness and social presence in video games and their relationship with video gaming flow states and addiction. The purpose of this research is to provide guidance to video game developers and marketers alike about the experiential outcomes of video game consumption.

Vividness is the breadth and depth of sensory information a medium provides (Steuer 1992). As technology approaches processing power and storage capacity to simulate reality, vividness in video games increases. Both breadth (number of senses) and depth (quality of stimuli) are important for the immersion of gamers in their gaming experience. Evidence for the importance of vividness in eliciting flow has been shown in virtual purchasing (Lin et al. 2025) and augmented reality contexts (Choi & Kim 2023), but not yet in video gaming. Social Presence in gaming is the personal connection with others felt by the gamer (Jung 2011). While not all video games have a social aspect, those that establish a sense of social presence also foster game loyalty (Tseng et al. 2015). Social presence is related with perceived enjoyment and concentration (Wang & Lee 2020) as well as flow (Takatalo et al. 2009), albeit through a presence-involvement-flow relationship. Although support for a presence, flow, and game addiction relationship has been examined previously (Park & Hwang 2009), for this study we examine the more nuanced social presence in this relationship.

In video game environments, flow state is an optimal and intrinsically enjoyable experience wherein players are fully immersed in gameplay, characterized by intense focus, a sense of control, the balance between skill and challenge, and loss of temporal awareness (Csikszentmihalyi et al., 2014). Vividness and social presence can both contribute to flow state (Cheng et al. 2014), but the relationship of these variables to addiction is a novel contribution of this study. Video game addiction is defined as the interference of daily life or broader life events as a result of video game use that is excessive or compulsive (Weinstein et al. 2010). In past studies flow experience is positively related with video game addiction (Park & Hwang 2009; Wu, Scott, & Yang 2013). However, Wan and Chiou (2006) showed that flow experiences are not related with addiction for online gamers. This study seeks to further advance knowledge about this relationship. Also, little is known about the relationship between vividness and video game addiction or social presence and addiction. Considering that these variables are related to flow, and that there is some evidence that flow is related to addiction, we hypothesize:

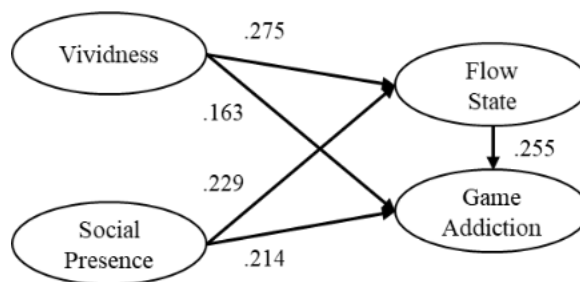
H1: The more vividly gamers experience video games the more gamers will a) enter a flow state; b) experience video game addiction; H2: The more social presence is experienced by gamers in video games the more gamers will a) enter a flow state; b) experience video game addiction; H3: Flow states in gaming are positively related with video game addiction.

Method and Findings

The data for this study were collected through an anonymous self-reported survey of 201 Chinese video gamers, aged 18 and above, who were recruited through email, game community social media pages, and announcements on social media platforms. The survey employed adapted measures for vividness, social presence, video game flow, and video game addiction, using a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Among the respondents, 67.2% were male, with an average age of 21.73. The majority (84.6%) fell within the 21-25 age group, reflecting the median age of video game players in China. Most participants reported playing games for up to 5 hours per week (63.2%), with 22.4% playing up to ten hours per week and 14.4% exceeding ten hours.

Using SmartPLS v4.0, a two-step analysis was conducted. The measurement model demonstrated strong reliability and validity, with loadings $> .70$ ($p < .01$), Cronbach's alpha $> .82$, and AVE $> .83$, confirming convergent validity (Hair et al. 2024). Harmon's one-factor test indicated minimal common-method bias, while Fornell-Larcker and HTMT values < 0.85 confirmed discriminant validity (Hair et al. 2024). In the structural model, results supported hypothesized paths, with vividness significantly influencing video game flow ($\beta = 0.275$) and addiction ($\beta = 0.163$), and social presence also strongly impacting video game flow ($\beta = 0.229$) and addiction ($\beta = 0.214$). Additionally, video game flow showed a strong effect on video game addiction ($\beta = 0.255$).

Figure 1. Path Analysis (All paths significant $p > .05$)



This study of 201 Chinese video game players highlighted that both vividness and social presence are crucial predictors of gamers' flow experiences and susceptibility to video game addiction. Notably, the most significant direct predictor of video game addiction was the flow experience itself ($\beta = 0.255$), emphasizing that immersive gameplay fosters addictive tendencies through heightened sensory detail and interpersonal connections within games. These findings underscore a pathway through which gaming environments influence immersion levels and addiction. As video game designers enhance vividness and social presence, they are cautioned about the potentially harmful consequence of addiction they may be facilitating. Understanding the role of immersive features and social connectivity in driving problematic gaming behavior should prompt the video game industry and public policy makers to adjust standards and regulations to protect susceptible gamers. Developers may implement features such as playtime reminders, built-in limits, or tools that support healthier gaming habits. Detailing the interplay of immersion and socialization, this study provides some guidance on behavioral addiction. Future research should further develop our understanding of game addiction and its correlates in the broader experience economy.

References

Cheng, L. K., Chieng, M. H., & Chieng, W. H. (2014). Measuring virtual experience in a three-dimensional virtual reality interactive simulator environment: a structural equation modeling approach. *Virtual Reality*, 18(3), 173-188.

- Choi, B. H., & Kim, E. M. (2023). Effect of Presence, Informativeness, Vividness, and Flow Experience of Augmented Reality-Based Performing Arts on Viewing Intention. *Journal of Digital Contents Society*, 24(12), 2993-3003.
- Csikszentmihalyi, M., Abuhamdeh, S., & Nakamura, J. (2014). Flow. In *Flow and the foundations of positive psychology: The collected works of Mihaly Csikszentmihalyi* (pp. 227-238). Dordrecht: Springer Netherlands.
- Hair, J.F., Sarstedt, M., Ringle, C.M. and Gudergan, S.P. (2024), *Advanced Issues in Partial Least Squares Structural Equation Modeling* (2nd edition), Sage, Thousand Oaks, CA.
- Jung, Y. (2011). Understanding the role of sense of presence and perceived autonomy in users' continued use of social virtual worlds. *Journal of Computer-Mediated Communication*, 16(4), 492-510.
- Lin, R., Chen, Y., Qiu, L., Yu, Y., & Xia, F. (2025). The influence of interactivity, aesthetic, creativity and vividness on consumer purchase of virtual clothing: The mediating effect of satisfaction and flow. *International Journal of Human-Computer Interaction*, 41(9), 5316-5330.
- Park, S., & Hwang, H. S. (2009). Understanding online game addiction: Connection between presence and flow. In *13th International Conference on Human-Computer Interaction, HCI International 2009* (pp. 378-386).
- Steuer, J. (1992). Defining virtual reality: Dimensions determining telepresence. *Journal of communication*, 42(4), 73-93.
- Takatalo, J., Häkkinen, J., Kaistinen, J., & Nyman, G. (2009). Presence, involvement, and flow in digital games. In *Evaluating user experience in games: Concepts and methods* (pp. 23-46). London: Springer London.
- Tseng, F. C., Huang, H. C., & Teng, C. I. (2015). How do online game communities retain gamers? Social presence and social capital perspectives. *Journal of Computer-Mediated Communication*, 20(6), 601-614.
- Wan, C. S., & Chiou, W. B. (2006). Psychological motives and online games addiction: A test of flow theory and humanistic needs theory for Taiwanese adolescents. *Cyberpsychology & behavior*, 9(3), 317-324.
- Wang, H., & Lee, K. (2020). Getting in the flow together: The role of social presence, perceived enjoyment and concentration on sustainable use intention of mobile social network game. *Sustainability*, 12(17), 6853.
- Weinstein, A. M. (2010). Computer and video game addiction — a comparison between game users and non-game users. *The American journal of drug and alcohol abuse*, 36(5), 268-276.
- Wu, T. C., Scott, D., & Yang, C. C. (2013). Advanced or addicted? Exploring the relationship of recreation specialization to flow experiences and online game addiction. *Leisure Sciences*, 35(3), 203-217.

**SESSION 34.4: JOURNAL OF CONSUMER MARKETING
SPECIAL ISSUE AND SYMPOSIUM**

Moderators:

Jie G. Driskell

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Mehak Bharti, Ph.D

Summary Brief

From Credibility to Brand Trust: Social Media Influencer Impact on The Brand Trust Grounded in Source Credibility Theory

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In the digital age, social media influencers have become powerful brand ambassadors, but what truly makes them trustworthy in the eyes of consumers? This study explores how influencer characteristics, trustworthiness, attractiveness, and expertise—alongside attitude homophily, shape consumer trust in brands within the Saudi Arabian market. Grounded in Source Credibility Theory, the research addresses a critical question: which traits genuinely drive brand trust, and which fall short?

Introduction

In today's digital marketplace, social media influencers have become essential in shaping consumer behavior and brand engagement. In Saudi Arabia, where over 95% of the population actively uses social media and spends an average of three hours online daily, influencer marketing has gained significant control (Statista, 2025). The industry is projected to reach \$95.69 million by the end of 2025, reflecting its growing strategic importance in the Saudi Arabia's digital economy. This growth aligns with Saudi Arabia's Vision 2030, which emphasizes digital transformation and economic diversification. As the country transitions toward a knowledge-based economy, understanding how influencers affect consumer trust becomes increasingly important. This study explores how social media influencer characteristics—grounded in the Source Credibility Theory—impact brand trust in the Saudi context.

Despite extensive research on influencer marketing (Ao et al., 2023; Cheung et al., 2022; Abdulaziz et al., 2024), there is a gap remained in understanding the psychological mechanisms through which social media influencer traits impact and foster brand trust, especially in high-growth digital markets like Saudi Arabia. While prior studies have examined social media influencer effects on engagement and purchase intention (Ao et al., 2023; Cheung et al., 2022), few studies have investigated the roles of perceived similarity with the influencer (attitude homophily) and credibility factors (trustworthiness, attractiveness, and expertise) in building brand trust.

This study addresses this gap by examining how consumers respond to influencer traits and whether these characteristics differentially affect trust in the promoted brand. Drawing on the Source Credibility Theory (Ohanian, 1990), the research focuses on five key constructs: trustworthiness, attractiveness, expertise, attitude homophily, and trust in the brand.

RQ1: How do influencer characteristics—specifically trustworthiness, attractiveness, expertise, and attitude homophily—affect consumer trust in the promoted brand?

Background

The study is grounded in Source Credibility Theory, which hypothesizes that a message’s persuasiveness depends on the perceived credibility of its source. This credibility is typically defined by three factors: trustworthiness, expertise, and attractiveness. These traits have been widely used to evaluate endorsers in marketing research. Having said that particularly in the context of social media, influencers are not only content creators but also perceived as relatable individuals. This has led to the inclusion of attitude homophily—the perceived similarity in values and lifestyle between influencer and follower—as a key construct. Research suggests that such perceived similarity enhances emotional connection and trust (Masuda et al., 2022; Griset et al., 2024).

Methodology

A quantitative survey-based approach was used to collect data from Saudi consumers who actively follow influencers. The survey included validated measurement items and used a 5-point Likert scale for most constructs, with a 7-point Likert scale for brand trust to ensure greater sensitivity and discriminatory power in capturing respondents’ nuanced levels of trust, and to maintain their engagement and attention throughout the survey (Chaudhuri and Holbrook, 2001; Zhang, et al., 2021).

The survey was distributed online via WhatsApp, Instagram, and Facebook in April 2025. Two screening questions were used to ensure that only qualified respondents were included. To analyze the data, Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed using SmartPLS 4.0.8.7, chosen for its suitability with small to medium samples and predictive modeling capabilities.

To address common method bias (CMB), both procedural (e.g., psychological separation, anonymity, attention checks) and statistical remedies (e.g., Harman’s single-factor test, VIF analysis) were applied. Results confirmed no significant CMB.

Results and Discussion

The sample included 205 valid responses. Most respondents were female (63.4%) and aged 26–35. Snapchat and Instagram were the most frequently used platforms. All constructs demonstrated strong reliability and validity results. Cronbach’s alpha and composite reliability exceeded 0.70, AVE values were above 0.50, and discriminant validity was confirmed.

Table 1: Hypothesis Testing

Hypothesis	Beta	t value	p value	Supported?
H1: Attitude Homophily -> Trust on Brand	0.271	4.26	0	Supported
H2: Attractiveness -> Trust on Brand	0.14	1.928	0.027	Supported
H3: Expertise -> Trust on Brand	0.083	0.781	0.218	Not Supported
H4: Trustworthiness -> Trust on Brand	0.227	2.376	0.009	Supported

The study analyzed data from 205 Saudi social media users and found that three out of four influencer characteristics significantly influenced brand trust, table 1. Attitude homophily had the strongest positive effect, followed by trustworthiness and attractiveness. Surprisingly, expertise did not have a significant impact, suggesting that emotional connection and perceived similarity are more influential than technical knowledge in building trust among consumers. These findings challenge traditional assumptions of Source Credibility Theory and highlight the importance of authenticity and relatability in influencer marketing.

Implications

The findings offer valuable theoretical and practical implications. Theoretically, the study refines Source Credibility Theory by demonstrating that not all credibility dimensions equally influence brand trust—particularly in the Saudi context, where expertise was found to be non-significant. This suggests that emotional and relational factors, such as trustworthiness and perceived similarity (attitude homophily), play a more critical role in digital consumer-brand relationships. Practically, marketers should prioritize influencers who are seen as authentic and relatable rather than those with formal expertise, especially in lifestyle and consumer-focused campaigns. The findings reflect collectivist cultural values, where trust and personal connection outweigh individual expertise. This highlights the need for culturally sensitive marketing strategies that align with local consumer expectations.

References

- Abdulaziz, T. A., Mohamed Omar, A. M. E., Farrag, M. M., & Elwardany, W. M. (2024). The attitudes homophily between influencers and customers and the intention to use the brand in social media marketing within the Tourism and Hospitality Industry: the role of trust. *The International Journal of Tourism and Hospitality Studies*, 6(2), 153-171.
- Ao, L., Bansal, R., Pruthi, N., & Khaskheli, M. B. (2023). Impact of social media influencers on customer engagement and purchase intention: A meta-analysis. *Sustainability*, 15, 2744. <https://doi.org/10.3390/su15032744>
- Aurelia, A. and Tajuddien, R. (2025). The influence of brand trust on brand evangelism through brand identification and passion among apple users. *JEBl*, 1(4), 134-152. <https://doi.org/10.69725/jebi.v1i4.130>
- Balabanis, G., & Chatzopoulou, E. (2019). Under the influence of a blogger: The role of information-seeking goals and issue involvement. *Psychology & Marketing*, 36(4), 342–353.
- Chaudhuri, A. and Holbrook, M.B. (2001) The Chain of Effects from Brand Trust and Brand Affect to Brand Performance: The Role of Brand Loyalty. *Journal of Marketing*, 65, 81-93. <http://dx.doi.org/10.1509/jmkg.65.2.81.18255> P.
- Cheung, M. L., Leung, W. K. S., Aw, E. C. X., & Koay, K. Y. (2022). “I follow what you post!”: The role of social media influencers’ content characteristics in consumers’ online brand-related activities (COBRAs). *Journal of Retailing and Consumer Services*, 66, 102940. <https://doi.org/10.1016/j.jretconser.2022.102940>
- Griset, L., Menvielle, L., & Dash, R. (2024). The impact of influencer power on consumers’ higher education brand trust: France & Canada compared. *Management international= International management= Gestión internacional*.
- Hovland, C. I., Janis, I. L., & Kelley, H. H. (1953). *Communication and persuasion*.
- Masuda, H., Han, S. H., & Lee, J. (2022). Impacts of influencer attributes on purchase intentions in social media influencer marketing: Mediating roles of characterizations. *Technological Forecasting and Social Change*, 174, 121246.
- Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers’ perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, 19(3), 39–52. <https://doi.org/10.1080/00913367.1990.10673191>
- Statista. (2025). Influencer advertising - Saudi Arabia. <https://www.statista.com/outlook/amo/advertising/influencer-advertising/saudi-arabia?currency=USD>
- von Mettenheim, W., & Wiedmann, K. (2021). The complex triad of congruence issues in influencer marketing. *Journal of Consumer Behaviour*, 20(5), 1277–1296.

Zhang, M., Xu, P., & Ye, Y. (2021). Trust in social media brands and perceived media values: A survey study in China. *Computers in Human Behavior*, 127, 107024. <https://doi.org/10.1016/j.chb.2021.107024>

Full Papers

Relational Pathways to Customer Value Co-Creation: Insights from Human and AI-Mediated Service Interactions

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This study investigates the relational mechanisms, such as trust, satisfaction, emotional support, and authenticity, that drive customer value co-creation across both human- and AI-mediated interactions. Drawing on service-dominant logic and value co-creation theory, we conducted four studies to examine this. Study 1 explores collaborative sales practices in a B2B industrial context. Studies 2 and 3 test a structural model showing that collaboration and organizational support enhance engagement and customer satisfaction. Study 4 focuses on AI service agents, showing that relational cues like emotional support and transparency build trust and parasocial connection. Customers also viewed AI agents as persuasive brand representatives, especially when the agents were perceived as authentic and when users reported greater technology fluency. These findings expand value co-creation theory to include AI service agents and offer actionable guidance for designing relationship-centered customer experiences across hybrid sales environments.

Keywords: customer value co-creation, service-dominant logic, AI service agents, relational mechanisms, trust, brand influence

As artificial intelligence (AI) tools become more sophisticated, customers increasingly engage with AI service agents that perform brand-facing tasks traditionally handled by humans (Plouffe et al., 2024). These AI agents, ranging from simple chatbots to complex virtual influencers, function not only as problem-solvers but also as relational actors that simulate human connection and represent the firm in service interactions (Chae et al., 2025; Shah et al., 2025). Their growing role in customer service challenges long-held assumptions about how customers evaluate and engage in brand relationships.

Salespeople have long served as the human face of firms, shaping the customer experience through emotional support, authenticity, and trust-building (Anderson & Narus, 1990; Morgan & Hunt, 1994). As AI agents increasingly occupy this space, it becomes important to understand how customers interpret relational cues, regardless of whether they come from a person or a machine. This shift raises new questions for service-dominant logic, particularly around how value is co-created when both human and AI agents contribute to the service experience (Vargo & Lusch, 2004).

Rather than treating AI agents as a replacement for salespeople, this research examines how relational processes unfold in both human and AI-mediated service settings. By focusing on the specific relational cues, such as emotional support, authenticity, and transparency, that drive trust, satisfaction, and perceived value, we offer insight into how customers co-create value with different types of service actors. These insights provide practical guidance for firms designing blended service environments where both humans and machines contribute to customer relationships.

Prior work has explored how human-like digital agents, (such as avatars, virtual influencers, and chatbots), influence engagement, psychological closeness, and parasocial relationships focusing on branding or entertainment contexts (Feng et al., 2024; Jun & Yi, 2020; Shah et al., 2025). For example, avatar human-likeness can increase feelings of closeness and trust in virtual reality environments (Chae et al., 2025). Similarly, research on digital coaching agents has examined how different agent types influence continued use and perceived connection (Feng et al., 2024). Other work has investigated how anthropomorphic cues and perceived authenticity influence consumer engagement and attachment to digital agents (Jun & Yi, 2020; Shah et al., 2025).

Our work extends value co-creation theory by examining how relational mechanisms unfold across distinct service contexts, which are those mediated by human salespeople and those facilitated by AI-powered service agents. Derived from service-dominant logic, which emphasizes value as co-created through interaction and resource integration (Vargo & Lusch, 2004), this research investigates how constructs such as trust, satisfaction, emotional support, and authenticity operate across both human and AI-mediated service interactions. Rather than directly comparing the two service actors, we explore the distinct relational pathways through which customers experience value in each context with the human salesperson and the AI service agent. Our research question asks: How do the mechanisms of customer value co-creation operate in human- and AI-mediated service settings, particularly regarding relational outcomes such as trust, satisfaction, and emotional connection?

To explore this, we first conducted an in-depth interview with a B2B sales manager from a large industrial supply company to ground our understanding of current salesperson practices, followed by four studies which were analyzed employing structural equation modeling (SEM). Across these studies, we make three key contributions. First, we show how collaborative strategies and value co-creation processes vary between human-led and AI-driven service interactions, an area underexplored in the existing literature on customer engagement and sales (Alnakhli et al., 2021). Second, we reveal how emotional support, authenticity, and transparency function as drivers of customer satisfaction and trust, revealing specific pathways through which AI agents can replicate (or fall short of) human relational value. Third, while prior research connects anthropomorphic cues to increased trust in AI agents (Jun & Yi, 2020; Shah et al., 2025), our study demonstrates that perceived authenticity, defined not by appearance but by responsiveness, transparency, and emotional support of the AI service agent, emerges as a significant relational driver in value co-creation contexts. This expands the concept of authenticity from a human-like trait to a co-constructed customer experience, revealing that customers can interpret AI agents as authentic co-contributors to service interactions.

Together, these findings add to the growing literature on customer value co-creation (Prahalad & Ramaswamy, 2004; Vargo & Lusch, 2004) by offering empirical evidence on how AI agents function as co-creators of value alongside human salespeople. This work provides timely insight into how brands can design and manage customer-facing technologies to support deeper engagement, trust, and long-term relationship-building.

Literature Review

Customer Value Co-creation

Imagine a salesperson from a digital marketing firm meeting with a small business owner looking to enhance her online presence. The salesperson opens the conversation with a warm, welcoming tone, encouraging open dialogue and making the client feel at ease sharing her thoughts. By using an interactive slide deck that allows the client to select product categories of interest, the salesperson facilitates a more customized, collaborative experience. This type of exchange reflects customer value co-creation, where the customer actively participates in shaping the service outcome (Vargo & Lusch, 2004). Through discovery-based questioning and an adaptive presentation, the salesperson creates a sense of emotional support and authenticity, reinforcing trust and relational depth. In the closing moments, the salesperson echoes the client's ideas and expresses appreciation, demonstrating how even subtle cues of transparency and responsiveness contribute to satisfaction and commitment in co-creation encounters.

In this scenario, the interaction between customer and salesperson is more of a collaboration between the customer and the salesperson than a transactional or pushy sales pitch. It is the salesperson who lays the groundwork for a conversation where the customer can share her thoughts to create solutions together with the salesperson. Customer value co-creation is the collaborative process by which firms and customers jointly create value through interactions, mutual resource integration, and shared experiences within a service ecosystem (Vargo & Lusch, 2004). This creates loyal, satisfied customers with a feeling of value in the relationship (Oliver, 1999). Engaged both emotionally and cognitively, co-created outcomes increase customer loyalty (Dwyer et al., 1987).

Sales and Customer Value Cocreation

Existing conceptual research is centered on the ability of customer value co-creation to increase consumer satisfaction, particularly during sales (Weitz and Bradford, 1999). For example, one study proposes that sales settings place co-creation of value in the form of collaborative problem-solving (Kohtamäki and Partanen, 2016). When customers co-create value with firms, the resulting products and services tend to align more closely with their personal preferences, which increases satisfaction (Pralhad & Ramaswamy, 2004). Roberts et al. (2014) examined what drives consumers to engage in co-creation and found that salespeople must actively develop skills to involve customers in these efforts. Plouffe et al. (2024) found that salespeople increasingly serve as connectors across the broader service ecosystem, managing internal collaboration and customer expectations to support co-creation. Additionally, Alnakhli et al. (2021) showed that when salespeople involve customers in shaping solutions, this process improves customer satisfaction and contributes to stronger sales performance. Together, these findings position co-creation as both a relational and performance-enhancing strategy in business-to-business sales environments. Recent advances in artificial intelligence have introduced new opportunities for customers to co-create value with non-human service agents across digital platforms (Chae et al., 2025; Feng et al., 2024; Jun & Yi, 2020; Plouffe et al., 2024; Shah et al., 2025).

AI Service Agents

Artificial intelligence (AI) service agents, such as chatbots, virtual assistants, and avatars, are digital tools designed to simulate human communication and assist customers with service-related tasks (Chae et al., 2024; Plouffe et al., 2024). These agents increasingly perform roles once held by human employees, including answering questions, offering product recommendations, and resolving service issues. A growing subcategory within this space is virtual influencers, which are AI-generated personas that act as brand representatives, engaging with customers through social media and other digital platforms (Shah et al., 2025).

Much of the current literature has explored how customers perceive the emotional expressiveness, and trustworthiness of these agents (Feng et al., 2024; Jun & Yi, 2020). Studies have shown that factors such as anthropomorphic cues, perceived realism, and transparency can enhance consumer engagement and create parasocial bonds (Chae et al., 2025; Shah et al., 2025). However, the majority of this research focuses on branding, entertainment, or influencer marketing contexts rather than service-oriented customer value co-creation. As a result, less is known about how these AI agents contribute to value co-creation in sales and service environments.

Relational outcomes such as trust, satisfaction, attachment, and parasocial connection are central to customer value co-creation (Morgan & Hunt, 1994; Vargo & Lusch, 2004). In traditional sales and service settings, human representatives have long been studied for their ability to build these relational ties with customers through empathy, responsiveness, and adaptability (Anderson & Narus, 1990; Alnakhli et al., 2021). These constructs help explain customer loyalty, perceived value, and long-term engagement. Prior research has also examined how these same constructs apply to AI agents. For example, Jun and Yi (2020) examined influencer interactivity in social media contexts, and Shah et al. (2025) looked at avatar realism and its impact on attachment.

Parasocial connection has also been explored; this refers to the one-sided emotional bond that individuals form with media figures, including digital agents, despite the lack of real interpersonal interaction (Feng et al., 2024; Shah et al., 2025). In the context of AI-powered service agents and virtual influencers, this connection becomes increasingly relevant as consumers engage with human-like technologies that simulate relational behaviors. Anthropomorphic cues, such as voice, expressions, and responsiveness, can increase feelings of familiarity and emotional closeness, which in turn promote parasocial relationships (Feng et al., 2024; Shah et al., 2025). These connections can influence customer perceptions of authenticity and trust, especially when the agent exhibits emotionally supportive and consistent behaviors (Chae et al., 2025; Jun & Yi, 2020). As customers increasingly interact with AI agents in relational roles, parasocial connection becomes a key construct for understanding how non-human entities can contribute to customer value co-creation and shape long-term customer relationships (Plouffe et al., 2024). As companies increasingly rely on AI technologies to handle tasks that were once exclusively human, understanding whether and how these relational dynamics differ by agent type (AI vs. human) can inform how firms design hybrid service systems and manage customer expectations.

Theoretical Foundations and Hypotheses Development

Customer Value Co-Creation (CVC)

Customer value co-creation (CVC) is the interactive process through which customers and firms collaboratively generate value by engaging in dialogue, co-planning, emotional engagement, and mutual resource integration (Grönroos, 2008; Prahalad & Ramaswamy, 2004; Vargo & Lusch, 2004). Rather than viewing value as something created solely by the firm, CVC emphasizes that value emerges through joint efforts between customers and organizations. In the sales context, co-creation happens when salespeople tailor solutions based on customer input, guide discovery conversations, and build personalized outcomes (Kohtamäki & Partanen, 2016; Roberts et al., 2014). Salespeople must stay responsive, interpreting verbal and nonverbal cues and incorporating feedback in real time to keep customers engaged throughout the process (Alavi et al., 2019). These interactions often increase customer satisfaction, loyalty, and perceived relational value (Anderson & Narus, 1990; Oliver, 1999). Based on this foundation, we propose the following:

H1: A value co-creation strategy positively influences customer engagement and long term partnerships.

H2: A value co-creation strategy has a positive impact on customer satisfaction.

H3: Customers who have real-time visibility (transparency) into the value created for them are more likely to perceive higher value in the products or services provided.

H4: A formalized process to capture and document value co-creation leads to increased customer satisfaction.

Customer Value Co-Creation with AI Service Agents

The concept of customer value co-creation (CVC) has emphasized collaborative processes in which customers and service providers jointly create personalized value through shared dialogue, mutual problem-solving, and interactive planning (Vargo & Lusch, 2004; Grönroos, 2008). While this traditionally occurs in human-to-human contexts, the increasing use of AI-powered service agents invites a broader view of how co-creation unfolds in digitally mediated environments. These agents range from chatbots and voice assistants to virtual avatars, and they engage customers through conversational interactions, offering tailored support, recommendations, and solutions (Chae et al., 2025; Plouffe et al., 2024).

Service-Dominant Logic (SDL)

Service-Dominant Logic (SDL) provides the theoretical basis for CVC by asserting that service— not goods— is the fundamental basis of exchange. Value, under SDL, is co-created by the integration and application of resources across actors in use contexts, rather than delivered by the firm (Vargo & Lusch, 2004). This perspective repositions the customer as a central participant in shaping their own value through interactive service experiences (Vargo & Lusch, 2004). In both human and AI-mediated settings, the context and nature of the interaction influence the perceived value that customers derive from the exchange. AI service agents can contribute meaningfully to value co-creation by enabling interactive, personalized, and adaptive service exchanges, even in the absence of human employees (Plouffe et al., 2024). Service-dominant logic (SDL) views value as co-created through use and experience, rather than embedded in a product or service itself (Vargo & Lusch, 2004). From this perspective, AI agents can serve as active participants in the co-creation process by adapting to user inputs and shaping the customer journey in real time. Although AI agents lack human emotion and consciousness, they can replicate key behaviors, such as responsiveness, personalization, and transparency, that contribute to perceived value in service encounters (Feng et al., 2024; Shah et al., 2025). These capabilities allow customers to engage in meaningful co-creation processes, even without a human counterpart.

Relational constructs such as emotional support, perceived authenticity, and transparency have been shown to influence co-creation success in human interactions (Verleye, 2015). When customers perceive an AI agent as supportive, transparent, and real enough to simulate authentic exchange, they may be more likely to experience satisfaction, trust, and influence from the interaction. Building on Service-Dominant Logic (SDL), we propose the following:

H5: a) Customers who perceive higher emotional support from an AI service agent will have higher satisfaction with the co-created service experience. b) Customers who perceive higher authenticity in an AI service agent will have higher trust in the co-created service outcome. c) Customers who perceive higher transparency during the AI-customer interaction will have higher satisfaction with the co-creation process. d) Customers who perceive higher transparency during the AI-customer interaction will have higher trust in the value co-created during the exchange. e) Customers who perceive higher emotional support, authenticity, and transparency from an AI service agent will have higher perceptions of the agent's influence on the co-creation of service-related decisions and outcomes.

Customers interacting with AI service agents assess more than just performance. They judge whether the AI service agent can credibly and persuasively represent the brand. Prior work on parasocial interaction shows that people can feel trust and emotional connection even with one-sided or artificial interactions (Hartmann & Goldhoorn, 2011). Building on earlier findings that customers form emotional and trust-based impressions of AI agents, we examine whether those relational impressions influence how customers perceive the agent's branding potential. Specifically, we investigate whether perceived authenticity and comfort with technology shape customers' beliefs about the AI service agent's ability to act as a persuasive brand representative, similar to a virtual influencer, and users with greater comfort and fluency with technology are more likely to anthropomorphize AI agents and engage relationally with them (Feng et al., 2024; Shah et al., 2025). Finally, we posit:

H6: Perceived authenticity will positively predict participants' perception of the AI service agent as a persuasive brand representative (i.e., virtual AI brand influencer), particularly among customers with higher levels of technology fluency.

The Present Research

Study 1

Method

We first conducted an in-depth interview with a regional sales manager at a leading B2B industrial supply company. The interview focused on understanding how his team engaged in customer value co-creation, how sales approaches evolved within the organization, and what performance outcomes followed these strategic changes. Sample questions included the following: "What are some circumstances in which you worked with your customers to provide value or engage in co-creation?" and "How do you ensure that your sales team is not solely focused on transactions but on building long-term relationships and client value?" (see Appendix A for the full list of interview questions).

Insights from this interview helped us to design the initial survey used in Study 1, which was distributed to members of the regional sales manager's team. The survey items were designed to reflect themes that emerged from the interview, such as collaboration, transparency, personalization, and performance outcomes related to customer co-creation. Out of 28 sales team members invited to participate, 25 completed the survey, resulting in an 89% response rate. This pilot study helped us to refine the survey used in subsequent studies and to ensure that our constructs were relevant, clearly worded, and grounded in frontline sales experience.

Results

We analyzed the responses using SPSS. Study 1 served as an exploratory pilot study designed to assess initial evidence for the relationship between collaborative sales strategies, customer engagement behaviors, and

perceived customer value outcomes. Twenty-five sales professionals completed a survey assessing their use of collaborative strategies and perceptions of customer satisfaction outcomes.

Descriptive results showed that salespeople were in favor of using collaborative strategies to improve customer satisfaction.. For example, 88% of participants agreed or strongly agreed that “This collaborative strategy has improved my sales performance.”¹ Across all four collaborative strategy items, the average ratings were high ($M = 5.96$, $SD = 1.0$), indicating perceived value in this approach. Internal consistency for the engagement-related items was acceptable (Cronbach’s $\alpha = .745$).

Study 1 offered initial support for the theorized relationship between collaborative sales strategies, customer engagement behaviors, and perceived customer value outcomes. These findings informed the design, measures, and hypotheses of Studies 2–4, which employed larger samples and formal hypothesis testing using Smart PLS-SEM models. Survey questions for Study 1 are provided in Appendix B.

Discussion

These results reinforce the central claim of service-dominant logic: value emerges through joint activity, not unidirectional delivery (Vargo & Lusch, 2004). Salespeople who involve customers in planning and problem-solving reported better customer relationship outcomes, and using practical tools, such as interactive presentations, discovery meetings, and customer-specific proposals, as enablers of co-creation. These early insights helped us shape the design of subsequent studies by identifying key variables to measure (e.g., customer participation, transparency, emotional support) and clarifying the kinds of relational outcomes to test.

Though the sample was small, this pilot study validated our approach and provided early support for our conceptual model. It showed that value co-creation practices are already embedded in B2B sales workflows and are perceived to improve satisfaction and loyalty, justifying deeper exploration in the full-scale studies that followed.

Study 2

Method

We developed the survey using validated scales adapted from prior research grounded in service-dominant logic (Vargo & Lusch, 2004) and value co-creation literature (Prahalad & Ramaswamy, 2004; Grönroos, 2008). Specifically, items for collaborative strategies and customer engagement were adapted from Roberts et al. (2014), and customer satisfaction items were adapted from Oliver (1999). Each construct included 3 to 4 reflective indicators measured using 7-point Likert scales ranging from 1 (strongly disagree) to 7 (strongly agree). Demographic variables such as age, gender, and education were included as controls.

We treated the initial qualitative and survey work conducted in Study 1, which included an interview with a regional sales manager at a leading B2B industrial supply company and a follow-up survey with 25 B2B salespeople, as a practical pretest to refine the constructs and ensure the clarity and relevance of the adapted measurement items prior to our main data collection. Participants for Study 2 were recruited from Prolific and screened by answering the question: “Are you currently working as a salesperson and engaging with customers?” Participants who answered “No” were thanked and exited from the study.

After data cleaning and attention checks, a total of 155 usable responses were retained for analysis. All constructs were modeled reflectively in SmartPLS 4 (Ringle et al., 2024). We followed Chin’s (1998) recommendations for evaluating PLS-SEM models, assessing measurement reliability, convergent and discriminant validity, and structural relationships using bootstrapping procedures with 5,000 subsamples.

Results

The outer model showed strong indicator reliability, with all factor loadings exceeding the 0.70 threshold (Hair et al., 2011). Composite reliability (CR) and Cronbach's alpha values for all constructs exceeded 0.80, indicating satisfactory internal consistency. Average variance extracted (AVE) values ranged from 0.62 to 0.75, supporting convergent validity. The HTMT matrix indicated that discriminant validity was achieved, as all HTMT ratios were below the conservative threshold of 0.90 (Henseler et al., 2015).

Structural Model

The model showed good fit (SRMR = 0.056; NFI = 0.91), with $R^2 = 0.316$ for customer engagement and $R^2 = 0.424$ for customer satisfaction. As predicted, collaborative strategy had a strong direct effect on customer engagement ($\beta = 0.389$, $t = 5.23$, $p < .001$, 95% CI [0.24, 0.53]) and a significant direct effect on customer satisfaction ($\beta = 0.389$, $t = 5.23$, $p < .001$, 95% CI [0.24, 0.53]). Customer engagement also significantly predicted customer satisfaction ($\beta = 0.347$, $t = 4.67$, $p < .001$, 95% CI [0.20, 0.49]). The indirect effect of collaborative strategy on customer satisfaction through customer engagement was significant ($\beta = 0.196$, 95% CI [0.10, 0.30], $p < .001$). Because the direct effect remained significant, the results support a partial mediation pathway. Survey questions for Study 2 are provided in Appendix B.

Discussion

The findings from Study 2 support the hypothesized relationships within the service-dominant logic and customer value co-creation framework. Collaborative strategies used by salespeople significantly increase customer engagement and directly and indirectly influence customer satisfaction. The mediation results confirm that when customers are actively involved in co-creation activities, such as joint planning or feedback exchanges, they experience greater satisfaction. This aligns with prior work emphasizing the role of mutual dialogue and planning in value creation (Vargo & Lusch, 2004; Roberts et al., 2014).

These results provide empirical support for H1, H2, H3, and H4, reinforcing the idea that value creation in B2B sales settings improves when customers are treated as contributors, not just recipients. By quantifying how collaborative efforts translate into engagement and satisfaction, Study 2 extends earlier research and affirms customer engagement as a key mechanism in the co-creation process. Survey questions for Study 3 are provided in Appendix C.

Study 3

Method

We developed the survey using validated items adapted from prior research on value co-creation and customer satisfaction. The collaborative strategy construct was adapted from Roberts et al. (2014), and customer satisfaction was measured using items based on Oliver (1999). Perceived organizational resources were assessed using reflective indicators that captured the degree to which salespeople believed they had sufficient tools, support, and time to engage in collaborative efforts with customers. All constructs were measured using 7-point Likert scales and modeled reflectively in SmartPLS 4 (Ringle et al., 2024), following Chin's (1998) criteria for evaluating PLS-SEM models.

After data cleaning and attention checks, a total of 199 usable responses were retained. Participants evaluated a recent sales interaction, focusing on the level of collaboration, visibility into the process, and their satisfaction with the service provided.

Results

All reflective indicators exceeded the 0.70 loading threshold. Composite reliability values for all constructs surpassed 0.80, and Cronbach's alpha confirmed internal consistency. AVE values ranged from 0.61 to 0.76, demonstrating convergent validity. Discriminant validity was established using the HTMT criterion, with all values below the conservative 0.90 threshold (Henseler et al., 2015).

The structural model showed good fit (SRMR = 0.051, NFI = 0.909), and explained $R^2 = 0.612$ of the variance in customer satisfaction. Collaborative strategy had a significant positive effect on customer satisfaction ($\beta = 0.392$, 95% CI [0.23, 0.53]), supporting Hypothesis 1. This result also supports Hypothesis 3, which proposes that customers who perceive greater transparency in the value co-creation process, through visible, collaborative efforts, experience greater satisfaction with the salesperson's service.

The availability of organizational resources significantly moderated the relationship between collaborative strategy and customer satisfaction ($\beta = 0.178$, $t = 3.27$, $p = .001$, 95% CI [0.08, 0.30]), supporting Hypothesis 4. When salespeople perceived greater support from their organization, the positive impact of collaborative strategies on customer satisfaction was stronger.

Discussion

Study 3 provides support for Hypotheses 1, 2 and 4. Collaborative selling strategies positively influenced customer satisfaction, confirming that co-creation efforts improve customer evaluations of the service experience. Hypothesis 3 was also supported: customer satisfaction increased when the collaborative process was made visible and transparent, such as through interactive discovery meetings (e.g., interactive slide decks). These findings emphasize the importance of relational transparency in value co-creation interactions.

In addition, organizational resources moderated the relationship between collaboration and satisfaction, supporting Hypothesis 4. When salespeople had access to adequate tools, support, and time, their collaborative efforts had a greater impact on customer satisfaction. These findings highlight the need for internal alignment to fully realize the benefits of co-creation in sales contexts.

Study 4

Method

Study 4 examined how customers co-create value with AI service agents and how relational perceptions such as emotional support, authenticity, and transparency influence downstream outcomes. Constructs were adapted from validated scales used in prior research on AI-human interaction and value co-creation (Feng et al., 2024; Jun & Yi, 2020; Shah et al., 2025). We measured perceived emotional support, authenticity, transparency, trust, satisfaction, and parasocial connection using 7-point Likert-type items. Control variables included gender, age, education, and technology fluency. All constructs were modeled reflectively and analyzed using SmartPLS 4 (Ringle et al., 2024).

To assess the effectiveness of the scenario framing, two items measured whether participants found the AI interaction realistic and believable, and whether they could imagine interacting with an AI service agent in a similar context. On a 7-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree), participants rated the AI scenario as realistic ($M = 5.34$, $SD = 1.45$) and reported being able to imagine interacting with such a virtual influencer ($M = 5.17$, $SD = 1.64$). Over half of respondents rated each item a 6 or 7 (53.03% and 50.13%, respectively), suggesting that the manipulations were moderately effective in establishing a believable AI context.

Participants were recruited through Prolific and screened to ensure they had recent experiences with AI-powered service agents (e.g., chatbots, virtual agents). After attention checks and data cleaning, 379 responses were retained. Measurement and structural models were evaluated using PLS-SEM and bootstrapping procedures with 5,000 resamples (Chin, 1998).

Results

All constructs met recommended thresholds for reliability and validity. Indicator loadings exceeded 0.70, composite reliability values were above 0.85, and AVE values exceeded 0.50. Cronbach's alpha ranged from 0.76 to 0.91, and discriminant validity was established using the HTMT criterion, with all values below 0.90 (Henseler et al., 2015).

The structural model demonstrated good fit (SRMR = 0.049; NFI = 0.918). Variance explained was substantial across the three focal constructs: $R^2 = 0.681$ for trust, $R^2 = 0.623$ for satisfaction, and $R^2 = 0.716$ for parasocial connection.

Bootstrapping results confirmed that emotional support significantly predicted trust ($\beta = 0.339$, $t = 5.87$, $p < .001$, 95% CI [0.22, 0.45]) and that transparency also predicted trust ($\beta = 0.213$, $t = 4.26$, $p < .001$, 95% CI [0.11, 0.31]). Authenticity emerged as a strong predictor of satisfaction ($\beta = 0.404$, $t = 7.45$, $p < .001$, 95% CI [0.30, 0.51]), and transparency also significantly predicted satisfaction ($\beta = 0.197$, $t = 3.85$, $p < .001$, 95% CI [0.09, 0.29]).

Each relational antecedent, emotional support ($\beta = 0.367$, $p < .001$), authenticity ($\beta = 0.219$, $p < .001$), and transparency ($\beta = 0.252$, $p < .001$) significantly predicted parasocial connection, supporting Hypotheses 5a through 5d.

Finally, authenticity significantly predicted perceptions of the AI service agent as a persuasive brand representative ($\beta = 0.441$, $t = 8.72$, $p < .001$, 95% CI [0.34, 0.53]), and technology fluency was also a significant predictor ($\beta = 0.315$, $t = 6.42$, $p < .001$, 95% CI [0.21, 0.41]). Engagement had a small, nonsignificant effect ($\beta = 0.086$, $t = 1.57$, $p = .117$, 95% CI [-0.02, 0.19]). These results support Hypothesis 6. Among control variables, only technology fluency significantly influenced brand representation; age, gender, and education were not significant predictors ($ps > .28$). Survey questions for Study 4 are provided in Appendix E.

Discussion

Study 4 offers new insight into how relational cues embedded in AI service agents shape customer perceptions and value outcomes. Emotional support and perceived authenticity significantly increased trust and satisfaction, supporting Hypotheses 5a through 5d and reinforcing the relevance of service-dominant logic in AI-mediated interactions. These findings highlight that AI agents designed to convey relational signals, rather than only perform tasks, can foster more meaningful engagement and stronger value perceptions.

The results also support Hypothesis 6, demonstrating that authenticity and technology fluency significantly influence whether customers perceive the AI assistant as a persuasive virtual brand representative. These findings extend prior work on customer value co-creation by showing that well-designed AI agents can serve as credible, relational extensions of the brand, not just support tools. When customers perceive AI agents as emotionally supportive, transparent, and authentic, they are more likely to form parasocial connections and attribute brand value to the interaction.

Theoretical Contributions

This work makes several theoretical contributions to the literature on customer value co-creation, human-AI service interaction, and relational mechanisms in technology-mediated service delivery. First, this research identifies specific actions salespeople employ to interact with their customers, such as interactive PowerPoint presentations, customer follow-up, feedback integration, and proactive communication. These interactions improve customer satisfaction and customer loyalty. This moves co-creation theory beyond abstract concepts and to more concrete, frontline salesperson behaviors, contributing a practical, behavior-based view of co-creation grounded in relationship-building and sales execution.

Second, this research extends service-dominant logic (Vargo & Lusch, 2004) by showing that value co-creation is not limited to interactions between customers and human service providers. We provide empirical evidence that customers can also co-create value with AI service agents, especially when those agents express human-like relational cues such as emotional support, authenticity, and transparency. These relational inputs significantly predict trust, satisfaction, and perceived value, replicating psychological mechanisms traditionally

observed in interpersonal contexts (Oliver, 1999; Prahalad & Ramaswamy, 2004). By confirming that customers engage in value co-creation with AI agents, we broaden the theoretical boundaries of service-dominant logic and clarify the relational conditions under which AI becomes a meaningful contributor to service value. Our results offer quantitative evidence that AI agents actively shape customer experience through relational responsiveness, not just task execution.

Third, this work empirically introduces parasocial connection into the framework of AI-mediated value co-creation. Although prior research has explored parasocial interaction in media (Hartmann & Goldhoorn, 2011) and influencer marketing (Shah et al., 2025), we have tested this construct in AI service contexts.

Finally, this study identifies the customer perceptions that shape how AI service agents are evaluated as brand representatives. We find that perceived authenticity and user technology fluency significantly predict whether customers view an AI agent as capable of influencing brand perceptions. This finding links value co-creation to branding literature and introduces virtual brand representation as a downstream outcome of relational co-creation interactions between AI service agents and customers.

Managerial Contributions

This research provides actionable guidance for managers responsible for sales performance, customer experience, and service delivery, particularly in settings where both human employees and AI service agents engage directly with customers. First, the findings from Studies 2 and 3 show that collaborative sales strategies (e.g. interactive side decks during discovery meetings) enhance customer engagement and satisfaction, especially when organizations provide adequate internal support for their salespeople. Sales managers should prioritize training that equips salespeople with the skills to engage in joint problem-solving with customers and ensure that support mechanisms (such as access to resources and manageable workloads) are in place. Without that infrastructure, the potential gains from co-creation may not translate into stronger customer relationships.

Second, our findings demonstrate that customers do not passively interact with AI agents. They assess them through more of a relational lens. For instance, emotional support, perceived authenticity, and transparency significantly shape trust, satisfaction, and parasocial connection. Managers developing AI service tools should invest in design features that convey these relational attributes.

Third, firms using AI agents in customer-facing roles should consider how these agents shape brand perception. We found that when customers perceive an AI service agent as authentic, (and when they feel comfortable with technology) they are more likely to view the AI service agent as a credible brand representative. Companies should ensure that AI interactions align closely with brand identity by tailoring the agent's voice, language tone, and communication style to the brand's personality, while maintaining emotional support, authenticity, and transparency in all customer interactions.

Lastly, our findings emphasize the importance of creating customer service systems where human representatives and AI agents complement one another. Customers notice and respond to relational qualities, whether they come from a human or AI. Rather than forcing a trade-off between AI automation and human connection, managers should build coordinated service strategies where AI handles efficiency tasks and humans step in for more complex, relationship-building moments. This approach allows both AI agents and human salespeople to contribute meaningfully to the overall customer experience.

Limitations and Suggestions for Future Studies

This work is not without limitations. First, our model included customer technology fluency as a predictor of perceived AI influence, but we did not test other individual-level characteristics that may shape customer responses to AI service agents. Future research should examine how other variables moderate relational outcomes. Second, although the findings were consistent across multiple survey studies, self-reported data remain vulnerable to bias. Although our attention checks and sample screening help mitigate this issue, future studies should incorporate multi-method designs using observational, behavioral, or experimental data to reduce the risk of common method variance. Third, while structural equation modeling allows us to test relational pathways quantitatively, this approach cannot fully capture the dynamic and evolving nature of co-creation processes, especially in blended human-AI environments. Future research could conduct qualitative or longitudinal studies that explore how relational perceptions form and change across repeated interactions with salespeople and AI agents. Finally, our

study focused on specific relational cues, such as collaboration, emotional support, authenticity, and transparency. Other relational signals or interaction features may also shape value co-creation outcomes. We encourage future researchers to expand the set of relational mechanisms and to examine their role across different service delivery channels and industry contexts.

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All data sets are available upon request.

References

- Anderson, J. C., & Narus, J. A. (1990). A model of distributor firm and manufacturer firm working partnerships. *Journal of Marketing*, 54(1), 42–58.
- Alavi, S., Habel, J., & Linsenmayer, K. (2019). What does adaptive selling mean to salespeople? An exploratory analysis of practitioners' responses to generic adaptive selling scales. *Journal of Personal Selling & Sales Management*, 39(3), 254–263.
- Alnakhli, H., Inyang, A. E., & Itani, O. S. (2021). The role of salespeople in value co-creation and its impact on sales performance. *Journal of Business-to-Business Marketing*, 28(4), 347–367.
- Chae, R.L., Lee, H. and Kim, E. (2025), The effects of avatar human-likeness on psychological closeness in virtual-reality. *Psychology & Marketing*, 42: 1132-1145.
- Chin, W. W. (1998). Issues and opinion on structural equation modeling. *MIS Quarterly*, 22(1), vii–xvi.
- Dwyer, F. R., Schurr, P. H., & Oh, S. (1987). Developing buyer-seller relationships. *Journal of Marketing*, 51(2), 11–27.
- Feng, Ying & Meng, Jie & Cheah, Jun-Hwa. (2024). From virtual trainers to companions? Examining how digital agency types, anthropomorphism, and support shape para-social relationships in online fitness. *Psychology & Marketing*. 42. 842-865.
- Goleman, D. (1995). *Emotional intelligence*. Bantam.
- Grönroos, C. (2008). Service logic revisited: Who creates value? And who co-creates? *European Business Review*, 20(4), 298-314.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152.
- Hartmann, T., & Goldhoorn, C. (2011). Horton and Wohl revisited: Exploring viewers' experience of parasocial interaction. *Journal of communication*, 61(6), 1104-1121.
- Hartmann, N. N., Wieland, H., & Vargo, S. L. (2018). Converging on a new theoretical foundation for selling. *Journal of Marketing*, 82(2), 1-18.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135.
- Jun, S., & Yi, J. (2020). What makes followers loyal? The role of influencer interactivity in building influencer brand equity. *Journal of Product & Brand Management*, 29(6), 803-814.
- Kohtamäki, M., & Partanen, J. (2016). Co-creating value from knowledge-intensive business services in manufacturing firms: The moderating role of relationship learning in supplier–customer interactions. *Journal of Business Research*, 69(7), 2498-2506.

- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3), 20.
- Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(4), 33–44.
- Plouffe, C. R., DeCarlo, T. E., Ferguson, J. R., Kumar, B., Moreno, G., Schmitt, L., Sleep, S., Volpers, S., & Wang, H. (2024). Salespeople and teams as stakeholder and knowledge managers: a service-ecosystem, co-creation, crossing-points perspective on key outcomes. *European Journal of Marketing*, 58(3), 704–732. <https://doi.org/10.1108/EJM-04-2023-0249>
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, 18(3), 5-14.
- Ringle, C. M., Wende, S., and Becker, J.-M. 2024. "SmartPLS 4." Bönningstedt: SmartPLS, <https://www.smartpls.com>.
- Roberts, D., Hughes, M., & Kertbo, K. (2014). Exploring consumers' motivations to engage in innovation through co-creation activities. *European Journal of Marketing*, 48(1/2), 147–169.
- Shah, T. R., Purohit, S., Das, M., & Arulsivakumar, T. (2025). Do I look real? Impact of digital human avatar influencer realism on consumer engagement and attachment. *Journal of Consumer Marketing*, (ahead-of-print).
- Songailiene, E., Winklhofer, H., & McKechnie, S. (2011). A conceptualisation of supplier-perceived value. *European Journal of Marketing*, 45(3), 383–418.
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1), 1-17.
- Verleye, K. (2015). The co-creation experience from the customer perspective: its measurement and determinants. *Journal of Service Management*, 26(2), 321-342.
- Weitz, B. A., & Bradford, K. D. (1999). Personal selling and sales management: A relationship marketing perspective. *Journal of the Academy of Marketing Science: Official Publication of the Academy of Marketing Science*, 27(2), 241–254.

Appendix A

Interview Questions

1. What are some circumstances in which you worked with your customers to provide value or engage in co-creation?
2. How has the company and sales approach changed over time?
3. How did you identify the need for change, and what drove your decision?
4. How did your team overcome obstacles during the strategy change?
5. How do you ensure that your sales team is not solely focused on transactions but on building long-term relationships and client value?

6. How is management adopting it internally (e.g., in a specific branch)
7. What are the performance outcomes of this change (e.g., number of clients, total revenue, relationships with clients)?
8. What was your clients' reaction when this change was first introduced?
9. Have your competitors adopted similar strategies? If so, have they adopted it before or after you and how did your competitors' strategy impact your business?

Follow up questions:

10. Do you or anyone in your organization use social media to promote value cocreation with your customers?

Appendix B

Study 1 Survey Questionnaire

Demographics

1. **Job Title**

What is your job title? (e.g., Sales Representative, Sales Manager)

2. **Industry Experience**

How many years have you worked in this industry?

- ☐ Less than 1 year
- ☐ 1–5 years
- ☐ 6–10 years
- ☐ 11–15 years
- ☐ 16–20 years
- ☐ More than 20 years

3. **Company Tenure**

How many years have you worked at your current company?

- ☐ Less than 1 year
- ☐ 1–5 years
- ☐ 6–10 years
- ☐ 11–15 years
- ☐ 16–20 years
- ☐ More than 20 years

4. **Age Group**

- ☐ 18–25
- ☐ 26–35
- ☐ 36–45
- ☐ 46–55
- ☐ 56+

5. **Gender**

- ☐ Male
- ☐ Female
- ☐ Non-binary
- ☐ Prefer not to say

Customer Engagement Measures (Mediator Variables)

Rated on a 7-point scale unless otherwise indicated

1. **Customer Engagement**

How engaged are your customers during the project planning/discovery phase?
(1 = Not engaged at all, 7 = Very engaged)

2. **Customer Follow-Up**

How often do customers initiate follow-up discussions or meetings?

- ☐ Never/rarely (a few times a year)
- ☐ Occasionally (about once a month)
- ☐ Frequently (several times a month)
- ☐ Very frequently (weekly or more)

3. **Interactive Presentations**

How effective are interactive presentations in increasing customer engagement?
(1 = Not effective at all, 7 = Very effective)

4. **Customer Feedback Integration**

How often do you integrate customer feedback into ongoing projects?
(1 = Never, 7 = Always)

5. **Proactive Communication**

How proactively do you communicate your customers' needs during the project?
(1 = Not proactive at all, 7 = Very proactive)

Dependent Variables

1. **Customer Longevity**

What percentage of your customers have been with your organization for over 3 years?

- ☐ 0%
- ☐ 1–10%
- ☐ 11–30%
- ☐ 31–50%
- ☐ 51–70%
- ☐ 71–90%
- ☐ 91–100%

2. **Relationship Strength**

How strong are your relationships with long-term customers?
(1 = Not strong at all, 7 = Very strong)

3. **Repeat Business**

How often do collaborative meetings/projects lead to repeat business?
(1 = Not often at all, 7 = Very often)

4. **Customer Commitment**

To what extent does customer engagement affect customer commitment to the project?
(1 = Not at all, 7 = Very much)

Collaborative Strategy Evaluation

Rated on a 7-point Likert scale (1 = Strongly disagree, 7 = Strongly agree)

1. This collaborative strategy has improved my sales performance.
2. It has enhanced my ability to meet sales targets.
3. It differs from previous strategies I have used.
4. It is more effective than other strategies I have used.

Appendix C

Study 2 Questionnaire

Screening Question

- Are you currently working as a salesperson and engaging with customers?
 - Yes
 - No

Demographics

1. **Job Title**
What is your job title? (e.g., Sales Representative, Customer Solutions Consultant, Sales Manager)
2. **Industry Experience**
How many years of experience do you have in this industry?
 - ⌞ Less than 1 year
 - ⌞ 1–5 years
 - ⌞ 6–10 years
 - ⌞ 11–15 years
 - ⌞ 16–20 years
 - ⌞ More than 20 years
3. **Company Experience**
How many years have you worked at your current company?
 - ⌞ Less than 1 year
 - ⌞ 1–5 years
 - ⌞ 6–10 years
 - ⌞ 11–15 years
 - ⌞ 16–20 years
 - ⌞ More than 20 years
4. **Age Group**
 - ⌞ 18–25
 - ⌞ 26–35
 - ⌞ 36–45
 - ⌞ 46–55
 - ⌞ 56+
5. **Gender**
 - ⌞ Male

- ☐ Female
- ☐ Non-binary
- ☐ Prefer not to say

Customer Engagement (Mediator Variables)

Participants rated the following on a 7-point Likert scale unless noted:

1. Customer Engagement

How engaged are your customers during the project planning/discovery phase?

(1 = Not engaged at all, 7 = Very engaged)

2. Customer Follow-Up

How often do customers initiate follow-ups after a collaborative session?

- Never/rarely (a few times a year)
- Occasionally (about once a month)
- Frequently (several times a month)
- Very frequently (weekly or more often)

3. Interactive Presentations

How effective are interactive presentations in increasing customer engagement?

(1 = Not effective at all, 7 = Very effective)

4. Customer Feedback Integration

How often do you integrate customer feedback into ongoing projects?

(1 = Never, 7 = Always)

5. Proactive Communication

How proactively do you communicate your customers' needs and feedback?

(1 = Not proactive at all, 7 = Very proactive)

Dependent Variables

1. Customer Tenure

What percentage of your customers have been with your organization for over 3 years?

- 0%
- 1–10%
- 11–30%
- 31–50%
- 51–70%
- 71–90%
- 91–100%

2. Relationship Strength

How would you rate the strength of your relationship with long-term customers?

(1 = Not strong at all, 7 = Very strong)

3. Repeat Business

How often do collaborative meetings/projects lead to repeat business?

(1 = Not often at all, 7 = Very often)

4. Customer Commitment

To what extent does customer engagement affect their commitment to the project?

(1 = Not at all, 7 = Very much)

Collaborative Strategy Effectiveness

Rate your agreement with the following statements:

(1 = *Strongly disagree*, 7 = *Strongly agree*)

1. This collaborative strategy with my customers has improved my sales performance.
2. This strategy has enhanced my ability to meet sales targets.
3. This strategy differs from previous strategies used.
4. This strategy is more effective than others used previously.

Attention Check

Select any word other than *age* or *gender*:

- Age
- Gender
- Race
- Income
- Religion

Appendix D

Study 3 Questionnaire

Screening Question

- Are you currently working as a salesperson and engaging with customers?
 - Yes
 - No

Prolific ID

- What is your Prolific ID? _____

Demographics

1. **Job Title**

What is your job title? (e.g., Sales Representative, Customer Solutions Consultant, Sales Manager)

2. **Industry Experience**

How many years have you worked in this industry?

- ☐ Less than 1 year
- ☐ 1–5 years
- ☐ 6–10 years
- ☐ 11–15 years
- ☐ 16–20 years
- ☐ More than 20 years

3. **Company Tenure**

How many years have you worked at your current company?

- ☐ Less than 1 year
- ☐ 1–5 years
- ☐ 6–10 years

- ☐ 11–15 years
 - ☐ 16–20 years
 - ☐ More than 20 years
4. **Age Group**
- ☐ 18–25
 - ☐ 26–35
 - ☐ 36–45
 - ☐ 46–55
 - ☐ 56+
5. **Gender**
- ☐ Male
 - ☐ Female
 - ☐ Non-binary
 - ☐ Prefer not to say

Customer Engagement Measures (Mediator Variables)

Rated on a 7-point scale unless otherwise noted

1. **Customer Engagement**
How engaged are your customers during project planning/discovery?
(1 = *Not engaged at all*, 7 = *Very engaged*)
2. **Customer Follow-Up**
How often do customers initiate follow-up discussions?
 - ☐ Rarely (a few times/year)
 - ☐ Occasionally (once/month)
 - ☐ Frequently (several times/month)
 - ☐ Very frequently (weekly or more)
3. **Interactive Presentations**
How effective are interactive presentations in increasing customer engagement?
(1 = *Not effective at all*, 7 = *Very effective*)
4. **Feedback Integration**
How often do you integrate customer feedback into ongoing projects?
(1 = *Never*, 7 = *Always*)
5. **Proactive Communication**
How proactively do you communicate customers' needs during the project?
(1 = *Not proactive at all*, 7 = *Very proactive*)

Dependent Variables

1. **Customer Longevity**
What percentage of your customers have been with your organization for over 3 years?
 - ☐ 0%
 - ☐ 1–10%
 - ☐ 11–30%
 - ☐ 31–50%
 - ☐ 51–70%
 - ☐ 71–90%

- 91–100%
- 2. **Relationship Strength**
How strong are your relationships with long-term customers?
(1 = *Not strong at all*, 7 = *Very strong*)
- 3. **Repeat Business**
How often do collaborative efforts lead to repeat business?
(1 = *Not often at all*, 7 = *Very often*)
- 4. **Customer Commitment**
How does customer engagement influence their commitment to the project?
(1 = *Not at all*, 7 = *Very much*)

Moderator Variables

Rated on a 7-point Likert scale (1 = Strongly disagree, 7 = Strongly agree)

1. I am confident in my ability to collaborate effectively with customers.
2. My workload negatively affects my ability to collaborate.
3. My organization supports collaborative strategies with customers.
4. I receive sufficient resources from my company to collaborate effectively.
5. I interact frequently with my key customers.
6. My customers actively use technology in the buying process.
7. My relationship with key customers is built on trust and collaboration.

Collaborative Strategy Evaluation

Rated on a 7-point Likert scale (1 = Strongly disagree, 7 = Strongly agree)

1. This collaborative strategy has improved my sales performance.
2. It has enhanced my ability to meet sales targets.
3. It differs from previous strategies I've used.
4. It is more effective than other strategies I've used.

Attention Check

Select any word **other than** *age* or *gender*:

- Age
- Gender
- Race
- Income
- Religion

Appendix E

Study 4 Questionnaire

Screening Question

Have you recently interacted with a customer service chatbot, automated online assistant, or AI-powered support system (e.g., through a website, app, or messaging platform) in the past 6 months?

- Yes
- No

Emotional Support from AI (Independent Variable)

Think of an AI-powered customer service interaction you had in the past 6 months (e.g., with a chatbot, virtual agent, or voice assistant). Rate your agreement with the following:

1. The AI assistant expressed empathy during the interaction.
2. The AI assistant's responses were emotionally supportive.
3. The AI assistant seemed to understand my feelings.
4. The AI assistant attempted to comfort or reassure me.

(1 = Strongly Disagree, 7 = Strongly Agree)

Perceived Authenticity of AI (Mediator)

1. The AI assistant's responses felt genuine.
2. I believed the AI assistant was sincere in its tone.
3. The AI interaction felt authentic.
4. The AI assistant came across as trustworthy.

(1 = Strongly Disagree, 7 = Strongly Agree)

Attention Check

To show you're paying attention, please select **Strongly Agree** for this question.
(1 = Strongly Disagree, 7 = Strongly Agree)

Customer Satisfaction with AI (Dependent Variable)

1. I was satisfied with the overall experience with the AI assistant.
2. The AI assistant interaction met my expectations.
3. I would be willing to use a similar AI assistant service again.
4. The AI assistant contributed positively to the experience.

(1 = Strongly Disagree, 7 = Strongly Agree)

Transparency of AI's Emotional Simulation (Moderator)

1. It was clear to me that this AI system was designed to simulate emotional expression.
2. The AI system informed me that it was intentionally using emotional language or tone.
3. I was aware that the AI assistant was programmed to respond empathetically.
4. The AI system explained its emotional capabilities clearly.

(1 = Strongly Disagree, 7 = Strongly Agree)

AI Skepticism (Moderator)

1. Emotional expressions from AI assistants feel fake, no matter how helpful they are.
2. I do not trust emotionally expressive AI assistants to be genuine.
3. When an AI assistant tries to sound caring, it feels manipulative.
4. AI systems should not try to act like they have feelings.

(1 = Strongly Disagree, 7 = Strongly Agree)

Customer Engagement with AI (Mediator)

1. I was mentally focused during the interaction.
2. I felt personally involved while communicating with the AI assistant.
3. I remained attentive throughout the interaction.
4. I was engaged during the entire experience.

(1 = Strongly Disagree, 7 = Strongly Agree)

Trust in AI (Dependent Variable)

1. I trusted the AI assistant's recommendations.
2. The AI assistant seemed reliable.
3. I believed the assistant had my best interest in mind.
4. I felt confident relying on the AI assistant.

(1 = Strongly Disagree, 7 = Strongly Agree)

Influence of AI as a Virtual Influencer (Dependent Variable)

1. I imagine that the AI assistant could influence how I feel about the brand.
2. The way the AI assistant communicates would likely affect my perception of the brand.
3. I would consider buying from the brand if the AI assistant interacted with me in a helpful and engaging way.
4. I could see the AI assistant serving as a persuasive representative of the brand.

(1 = Strongly Disagree, 7 = Strongly Agree)

Parasocial Relationship with AI (Dependent Variable)

1. I would likely feel that the AI assistant has a personality.
2. I could imagine having a casual, human-like conversation with the AI assistant beyond just completing a task.
3. I think I would feel like I was getting to know the AI assistant over time.
4. I could see the AI assistant serving as an effective brand spokesperson.

(1 = Strongly Disagree, 7 = Strongly Agree)

Technology Fluency (Control Variable)

1. I am confident using new AI technologies.
2. I quickly learn to operate AI digital tools.
3. I frequently use AI-powered applications.
4. I am comfortable interacting with AI assistants.

(1 = Strongly Disagree, 7 = Strongly Agree)

Manipulation Check

1. The AI assistant scenarios presented in this survey were realistic and believable.
2. I could imagine interacting with an AI virtual influencer like the one described in this survey in an online setting.

(1 = Strongly Disagree, 7 = Strongly Agree)

Demographics

1. Attention Check

Please select any word **other than** age or gender:

- ☐ Age
- ☐ Gender
- ☐ Race
- ☐ Income
- ☐ Religion

2. Age

What is your age? (Open-ended)

3. Gender

- ☐ Male
- ☐ Female
- ☐ Non-binary
- ☐ Prefer not to say

4. Education Level

- ☐ Did not complete high school
- ☐ High school diploma or equivalent
- ☐ Some college, no degree
- ☐ Associate degree
- ☐ Trade or vocational school certificate
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Doctoral or professional degree (e.g., Ph.D., J.D., M.D.)

**SESSION 34.5: INTERNATIONAL JOURNAL OF
ADVERTISING SPECIAL ISSUE AND SYMPOSIUM**

Moderators:

Pia Albinsson

Jie Fowler

Amy Watson

Summary Brief

The Importance of Message Framing for Student-Athletes in the Era of Name, Image, and Likeness (NIL)

James Blair, Eastern Kentucky University, USA

Lee Allison, Texas A&M University, USA

Peter Titlebaum, University of Dayton, USA

Prachi Gala, Kennesaw State University, USA

Joseana Moreira Vaz, Eastern Kentucky University, USA

Introduction

Sport plays a significant role in many cultures around the world. Within the United States we see a significant number of consumers who engage with not only professional sports, but also at the collegiate level. We see fans not only attend games, but also invest in pre-game rituals like tailgating due to their strong team identification (Albinsson, 2021). Universities even utilize student sections at sporting events to get them engaged and convert them to loyal fans as alumni, so they continue supporting their athletic program and university post-graduation (Brito et al., 2015; Lareau and Titlebaum, 2020). Sport has been one way to keep alumni connected and engaged. Universities even have strategies to host college sporting events on their campus to garner national attention and provide an economic boost to their community (Gardner III and Titlebaum, 2020). Brands have wanted to enter this space to be associated with the universities, student population, and overall sport spectacle of college sports (Crow et al., 1999).

Background

Within that college sports landscape, we have seen significant disruption and changes that have provided student-athletes more autonomy and the ability to move from amateurism to the monetization of their personal brand through their name, image, and likeness (NIL). There is still a lack of understanding in how to effectively communicate NIL messages to audiences that result in positive outcomes for the partnering brand. This research utilizes prospect theory through message framing strategies to show how brands can see positive results from sport fans in terms of self-brand connection, attitudes, intention to recommend, purchase intentions, and perceived quality. This is done across two studies with a fictitious college basketball student-athlete and a shoe store as well as a real college football student-athlete and energy drink where we successfully replicated the main effects and serial mediating effects of self-brand connection and attitudes on message framing and the three outcome variables (intention to recommend, purchase intentions, and perceived quality). NIL has been supported through new legislation which allows student-athletes to earn compensation from third parties for marketing purposes (Berg et al., 2023). This has resulted in brands wanting to partner with student-athletes to promote their products because the endorsers are often perceived as authentic and have large, growing followings (Fortunato, 2025). We observe that consumers perceive advertisements differently across sports. For example, Raggiotto et al. (2020) found consumer differences in persuasion effectiveness, product attractiveness, purchase intention, and willingness-to-pay between advertisements in traditional and extreme sports. Therefore, the replication of results across multiple sports is important to understand if the examined phenomenon holds across the different consumption contexts.

Brands outside of the sports landscape have used these entertainment events to improve their brand image in the marketplace (Grohs, 2016). Some organizations have questioned the effectiveness of sport sponsorships (Thwaites, 1998), but we still see these opportunities being sought out by organizations as a part of their marketing campaigns and overall strategies to drive positive performance outcomes for themselves. Brands choosing athletes to endorse their products is a critical decision as part of their overall marketing campaign and can significantly impact an organization (Marin, 1996). Understanding which student-athlete should be chosen to represent a brand, as well as how to market them is critical to the success of the marketing campaign.

Key Findings

First, the main effects were tested of message framing on the dependent variables of interest. Message framing has a significant effect on self-brand connection [$F(1, 87) = 6.41, p = .01$], attitude [$F(1, 87) = 13.67, p < .01$], intentions to recommend [$F(1, 87) = 11.37, p < .01$], purchase intentions [$F(1, 87) = 9.81, p < .01$], and perceived quality [$F(1, 87) = 6.71, p = .01$], where the gain-framed message had significantly higher levels of self-brand connection ($mgain = 4.38, SE_{gain} = .22, mloss = 3.52, SE_{loss} = .26$), attitudes ($mgain = 4.88, SE_{gain} = .15, mloss = 4.01, SE_{loss} = .18$), intentions to recommend ($mgain = 5.22, SE_{gain} = .18, mloss = 4.28, SE_{loss} = .21$), purchase intentions ($mgain = 4.93, SE_{gain} = .19, mloss = 4.00, SE_{loss} = .23$), and perceived quality ($mgain = 4.92, SE_{gain} = .17, mloss = 4.24, SE_{loss} = .20$).

Next, we tested for the serial mediation effect of self-brand connection and attitude on message framing and each of the three outcome variables: intention to recommend, purchase intentions, and perceived quality. Message framing significantly impacted self-brand connection ($b = -.8533, t = -2.5323, p = .0131, LLCI = -1.5232, ULCI = -.1834$), suggesting participants receiving the gain-framed message had higher levels of self-brand connection. Next, self-brand connection increased attitude levels ($b = .5346, t = 10.7425, p < .0001, LLCI = .4357, ULCI = .6336$). There was a significant impact of attitude on intention to recommend ($b = .7222, t = 7.2741, p < .0001, LLCI = .5247, ULCI = .9196$). Attitude increased purchase intentions ($b = .5806, t = 5.6623, p < .0001, LLCI = .3767, ULCI = .7845$). Lastly, attitude increased perceived quality ($b = .5553, t = 4.7296, p < .0001, LLCI = .3218, ULCI = .7888$).

We then replicated the results in study two which included a real student-athlete and brand. First the main effects were tested of message framing on the dependent variables of interest to replicate the findings of study one. Message framing has a significant effect on self-brand connection [$F(1, 119) = 10.71, p < .01$], attitude [$F(1, 119) = 20.49, p < .01$], intention to recommend [$F(1, 119) = 11.82, p < .01$], purchase intentions [$F(1, 119) = 6.60, p = .01$], and perceived quality [$F(1, 119) = 10.87, p < .01$], where the gain-framed message had significantly higher levels of self-brand connection ($mgain = 3.80, SE_{gain} = .20, mloss = 2.76, SE_{loss} = .25$), attitudes ($mgain = 4.39, SE_{gain} = .16, mloss = 3.22, SE_{loss} = .20$), intention to recommend ($mgain = 4.46, SE_{gain} = .20, mloss = 3.38, SE_{loss} = .25$), purchase intentions ($mgain = 4.55, SE_{gain} = .23, mloss = 3.62, SE_{loss} = .28$), and perceived quality ($mgain = 4.95, SE_{gain} = .15, mloss = 4.17, SE_{loss} = .18$). Together, study two's successful replication of study one's main effect.

Next, we test for the replication of the serial mediation effects. Message framing significantly impacted self-brand connection ($b = -1.0367, t = -3.2726, p = .0014, LLCI = -1.5232, ULCI = -.1834$), suggesting participants receiving the gain-framed message had higher levels of self-brand connection. Next, self-brand connection increased attitude levels ($b = .6020, t = 11.7603, p < .0001, LLCI = .5006, ULCI = .7034$). There was a significant impact of attitude on intention to recommend ($b = .3826, t = 5.0031, p < .0001, LLCI = .2312, ULCI = .5241$). Attitude increased purchase intentions ($b = .3185, t = 3.1019, p = .0024, LLCI = .1151, ULCI = .5220$). Lastly, attitude increase perceived quality ($b = .1789, t = 2.2695, p = .0251, LLCI = .0228, ULCI = .3351$). Taken together, study two successfully replicated study one's serial mediation effect.

References

- Albinsson, P. A., Shows, G. D., & Boya, U. O. (2021). Celebrating together: generational cohort differences in game-day tailgating rituals. *Journal of Managerial Issues*, 33(3), 259-273.
- Berg, B. K., Hutchinson, M., Wells, J. E., Walsh, D. W., Simmond, A., & Havard, C. T. (2023). The policy discourse of name, image, and likeness in college athletics. *Journal of Issues in Intercollegiate Athletics*, 16(1), 26.
- Brito, D, Dvorsky, J., Weingarz, K., Titlebaum, P., (2015) Creating a model for student support groups, *Applied Research in Coaching and Athletics Annual*, 30(1), 207-223.
- Crow, B., Titlebaum, P. J., & Branch, D. J. (1999). New title sponsor recognition at a college football bowl game. *Applied Research in Coaching and Athletics Annual*, 1(1), 119-129.
- Fortunato, J. A. (2025). University leadership competency in sponsorship and student-athlete name, image and likeness. *Journal of Education Advancement & Marketing*, 9(4), 388-400.

- Gardner III, J. E., & Titlebaum, P. J. (2020). The Dayton mystique: The NCAA's fifty-year love affair with the University of Dayton. *Journal of Contemporary Athletics*, 14(1), 71-79.
- Grohs, R. (2016). Drivers of brand image improvement in sports-event sponsorship. *International Journal of Advertising*, 35(3), 391-420.
- Lareau, C. J., & Titlebaum, P. J. (2020). Building and maintaining student sections for the modern era. *Journal of Contemporary Athletics*, 14(3), 177-189.
- Martin, J. H. (1996). Is the athlete's sport important when picking an athlete to endorse a nonsport product? *Journal of Consumer Marketing*, 13(6), 28-43.
- Raggiotto, F., Scarpi, D., & Moretti, A. (2020). Advertising on the edge: Appeal effectiveness when advertising in extreme sports. *International Journal of Advertising*, 39(5), 655-678.
- Thwaites, D., Aguilar-Manjarrez, R., & Kidd, C. (1998). Sports sponsorship development in leading Canadian companies: Issues & trends. *International Journal of Advertising*, 17(1), 29-49.

Full Paper

Persuading the Audience: Integrated Marketing Communications Strategies in the Entertainment Industry. Evidence from Europe

Dr. Anders Parment, Stockholm University

The entertainment industry presents a challenge for marketers: the quality of experiences cannot be fully evaluated before consumption. Moreover, the character of the products might make demand fluctuate strongly. This study investigates how entertainment companies implement Integrated Marketing Communications (IMC) strategies to enhance brand performance and manage audience expectations. A qualitative multi-case design was used to map practices from music, live performance, sports, film, and event sectors in Northern Europe. Findings reveal that the “one voice” dimension dominates current IMC practice, while interactivity and cross-functional planning are underutilized. Advertising and public relations are the most frequently employed tools, with word of mouth (WOM)—particularly negative WOM—having a disproportionate influence on outcomes. The study identifies novel concepts, including BrandCebo, target group integration, quiet WOM, and the strategic use of mystery and FOMO in campaigns. These insights extend IMC theory to the entertainment context, offering practical implications for maximizing campaign effectiveness.

Keywords: integrated marketing communications, entertainment marketing, experience goods, word of mouth, advertising strategy

Introduction

Entertainment—whether in the form of live music, sporting events, film premieres, or theatre—relies on audiences’ willingness to invest in experiences that cannot be sampled beforehand. Accordingly, the moment of purchase is heavily shaped by the marketing communications that frame the anticipated experience. This reliance on persuasive, pre-consumption messaging makes the entertainment industry an important context for advancing research, particularly in relation to Integrated Marketing Communications (IMC).

IMC seeks to create consistency and synergy across all communication touchpoints, ensuring that messages are cohesive, strategically aligned, and capable of generating maximum impact (Luxton, Reid, & Mavondo, 2014). While widely discussed in advertising scholarship, IMC remains theoretically contested and operationally vague (Luck & Moffatt, 2009), with differing definitions emphasising varying elements such as one voice, interactivity, cross-functional planning, and long-term relationships (Porcu, del Barrio-García, & Kitchen, 2012).

Entertainment marketing magnifies IMC’s relevance and complexity. Experience goods (Nelson, 1970) carry inherent uncertainty for consumers; purchase decisions are influenced not only by brand communications but also by interpersonal recommendations and online conversations (Neelamegham & Jain, 1999; Rosario et al., 2016). Word of mouth (WOM), particularly WOM shared in social media, can reinforce or undermine marketing efforts, making integrated strategies essential for managing the brand narrative.

Yet, research into IMC in the entertainment sector remains limited. Studies have predominantly focused on U.S. markets and specific subsectors such as film and gaming (Schöndeling, Weijters, & Vermeir, 2023), leaving broader industry contexts and other national markets underexplored (Wu, Lin, & Wang, 2022). Our study addresses this gap by examining IMC practices in the entertainment industry in Northern Europe. By focusing on how firms integrate advertising with other communication tools, and how they navigate WOM in promoting experience goods, this research contributes to IMC theory and marketing practice.

Purpose

The study addresses three research questions:

How does word of mouth affect companies that market experience goods in the entertainment industry?

In what way, and to what extent, are entertainment companies implementing IMC strategies in their marketing?

How can IMC strategies support overall marketing outcomes in this sector?

Literature Review

Integrated Marketing Communications (IMC)

IMC has been defined as a concept of marketing communications planning that recognizes the added value of a comprehensive plan that evaluates the strategic roles of a variety of communication disciplines, and combines these disciplines to provide clarity, consistency, and maximum communication impact (American Association of Advertising Agencies, cited in Schultz, 1993, p. 17). While this foundational definition remains influential, subsequent work has expanded IMC to include stakeholder engagement, relationship-building, and long-term strategic integration (Duncan & Mulhern, 2004; Kerr et al., 2008). Porcu et al. (2012) conceptualise IMC as comprising four key dimensions: One voice – delivering a consistent, coherent message across all channels and touchpoints (Phelps & Johnson, 1996); Interactivity – fostering two-way communication with customers and stakeholders to build relationships. Cross-functional planning – integrating efforts across organisational departments to ensure strategic alignment; and Profitable long-term relationships – prioritising enduring stakeholder relationships over short-term transactions.

Empirical studies suggest that IMC can enhance campaign effectiveness, strengthen brand market performance, and improve financial results (Luxton et al., 2014). However, IMC also faces criticism for conceptual vagueness and perceived lack of novelty (Hutton, 1996). This debate underscores the need for industry-specific investigations that clarify how IMC is operationalised in practice.

Experience Goods and Word of Mouth

Experience goods—products whose quality cannot be fully assessed before purchase—require persuasive communication to reduce consumer uncertainty (Neelamegham & Jain, 1999). In entertainment contexts, advertising can provide consumers with symbolic previews, evoking desired emotions and imagery that guide purchase intentions (Liu et al., 2018). However, such goods are especially vulnerable to WOM, as peer opinions can outweigh formal brand messages (Park & Lee, 2008).

WOM, both offline and online, is a potent form of consumer-to-consumer communication that can influence brand perceptions, purchase intentions, and post-purchase satisfaction (Rosario et al., 2016). Negative WOM often exerts stronger effects than positive (Park & Lee, 2008), and the amplification afforded by social media heightens its impact (Kimmel & Kitchen, 2014). This interplay between brand-generated and consumer-generated communications makes IMC particularly relevant in experience-good sectors.

Advertising and Related Communication Tools

Advertising remains a cornerstone of IMC, providing reach, brand image reinforcement, and message control (Anantachart, 2005). In entertainment marketing, advertising is often complemented by public relations, direct marketing, sales promotions, personal selling, and event marketing—each with distinct advantages and limitations (Balan & Krupa, 2024; Hershey, 2005). Integrating these tools under a coherent IMC framework can maximise synergies, for instance, using PR to amplify advertising messages or employing events to generate WOM that supports campaign narratives (Hede & Kellett, 2011).

Method

This study adopts a qualitative, abductive multi-case design to explore how IMC is operationalised in the entertainment industry. The approach enables an iterative movement between theory and data, allowing emergent insights to refine the conceptual framework. Multiple cases were selected to capture diversity within the sector, including companies in music, live performance, sports, film, and events. This design facilitates cross-case comparison and strengthens analytical generalisation (Yin, 2018).

Data were gathered through semi-structured interviews with senior marketing professionals across the selected companies. The interview guide addressed perceptions of IMC, use of communication tools, integration practices, and the role of WOM in marketing experience goods. Interviews were conducted in person or via video conferencing, recorded with consent, and transcribed verbatim.

Thematic analysis was applied to identify patterns across the dataset. Coding combined deductive categories derived from IMC theory (e.g., Porcu et al., 2012) with inductive codes emerging from the interviews. This approach allowed theoretical constructs to be tested and refined while accommodating industry-specific insights.

Credibility was enhanced through member checking, where preliminary findings were shared with participants for validation (Guba & Lincoln, 1994). Transferability was supported by providing thick description of cases and context. Ethical approval was obtained from the authors' institution, and all participants provided informed consent. Data confidentiality was maintained by anonymising company and individual identifiers.

Findings

Analysis revealed that IMC in the entertainment industry is characterised by selective tool usage, uneven application of IMC dimensions, and significant influence of WOM. While advertising and PR dominate, integration across tools and departments is partial, and new, context-specific practices have emerged.

Advertising remains the primary communication tool, particularly digital formats enabling targeted reach at relatively low cost. Campaigns focus on creating anticipation and emotional engagement, often leveraging video content and countdown mechanisms to event dates. Public relations is the second most widely used tool, valued for its credibility and capacity to generate media coverage, particularly around launches and special events.

Other tools are applied more selectively. Direct marketing is used for personalised event invitations and loyalty offers, often linked to ticketing databases. Sales promotions such as early-bird pricing are deployed tactically but sparingly to avoid brand devaluation. Events serve as both products and promotional platforms, creating immersive brand experiences that stimulate WOM.

The one voice principle is the most consistently applied dimension. Firms strive for consistent visual identity, tone, and messaging across advertising, PR, and digital channels. Interactivity is less systematically implemented, often confined to social media engagement rather than integrated two-way dialogue across touchpoints. Cross-functional planning is hindered by departmental silos; marketing often operates separately from event operations, sales, or customer service. Profitable long-term relationships are acknowledged as desirable but receive limited strategic investment, with many campaigns focusing on short-term ticket sales.

Our empirical data consistently suggest that negative WOM—particularly in digital spaces—has greater impact than positive. Negative reviews or social media criticism can quickly undermine campaigns, especially for high-profile launches. Firms monitor online discourse closely, with some investing in rapid-response strategies to address misinformation or dissatisfaction.

Quiet WOM emerged as a distinctive phenomenon: rather than overt online discussion, potential consumers may receive recommendations in private channels (e.g., messaging apps), making such influence less visible but still impactful.

Our study identified several practices not widely addressed in IMC literature: BrandCebo: a placebo-like effect where brand strength influences perceived experience quality (Malka, 2017). Target group integration: involving audiences in content creation or campaign testing to align outputs with consumer expectations.

Mystery marketing: deliberately withholding full information to build intrigue and encourage speculation.

FOMO (fear of missing out) appeals: leveraging scarcity and exclusivity to drive early purchase behaviour.

These tactics complement traditional advertising, often serving as conversation triggers that amplify WOM.

Discussion

Our study extends Integrated Marketing Communications (IMC) theory by examining its application in the entertainment industry, a sector defined by the challenges of marketing experience goods. The findings reinforce prior work emphasising the value of message consistency (Phelps & Johnson, 1996; Luxton et al., 2014), with “one

voice” emerging as the dominant IMC dimension in practice. However, the relative underdevelopment of interactivity, cross-functional planning, and long-term relationship-building suggests that entertainment firms are not fully realising IMC’s strategic potential (Porcu et al., 2012).

The entertainment industry’s reliance on persuasive pre-purchase communication aligns with the need for strong IMC coordination. Advertising’s dominance reflects its ability to provide symbolic previews that help consumers imagine the experience (Liu et al., 2018), while PR’s credibility supports brand positioning (Balan & Krupa, 2024). However, the observed reliance on short-term sales campaigns over relationship marketing contradicts IMC’s emphasis on profitability through long-term stakeholder engagement (Porcu et al., 2012).

The findings suggest that in high-risk purchase contexts, such as experience goods, IMC must balance anticipation-building with credibility management. This balance becomes more critical when WOM—especially negative—can rapidly amplify through digital channels (Rosario et al., 2016; Park & Lee, 2008).

The disproportionate influence of negative WOM observed in our study supports prior evidence that unfavourable peer communication can outweigh positive brand-generated messages (Park & Lee, 2008; Wang & Güçlü, 2023). By highlighting “quiet WOM,” the study adds nuance to existing conceptualisations of WOM, showing that less visible, private-channel recommendations also shape consumer behaviour. This challenges the assumption that social media monitoring alone provides a complete view of consumer discourse.

From an IMC perspective, WOM emerges as both an external variable to be managed and a potential component of the communication mix when integrated proactively through strategies that encourage consumer advocacy.

The identification of BrandCebo, target group integration, mystery marketing, and FOMO appeals offers concrete, practice-based contributions to IMC and advertising scholarship. These tactics function as “amplifiers” within IMC, sparking conversations that sustain audience attention between formal advertising bursts. For instance, mystery marketing aligns with scarcity and curiosity appeals in advertising research, while FOMO strategies leverage psychological triggers associated with exclusivity.

By embedding such tactics into the IMC framework, entertainment firms can create self-reinforcing communication ecosystems in which paid, earned, and shared media interact to sustain momentum.

Theoretical Contributions

Our study recognizes the role of FOMO in marketing experience goods. By creating FOMO, marketers can help reduce consumer uncertainty when deciding whether to purchase these goods. Another finding is the applicability of BrandCebo—a previously known effect now shown by our data to function in the entertainment industry. This suggests BrandCebo can facilitate FOMO and be an effective marketing strategy for entertainment goods.

Contrary to earlier research, our results indicate that leveraging the inherent mystery and uncertainty of experience goods can actually be advantageous, rather than always providing detailed information. However, for this strategy to succeed, the brand’s image must align with the use of mystery and uncertainty.

We also identify the concept of quiet word of mouth, which extends traditional word of mouth. This aspect shows how a strong brand and market presence may cause consumers to assume a company organizes well-known or new events, even when it does not.

These findings have been added to the entertainment-specific section of our model due to their relevance for marketing experience goods. Our research also reveals increased complexity in branding within the entertainment sector, emphasizing the need to focus on product-based over company-based branding for experience goods.

In terms of IMC, we add two new elements to our model. First, empirical findings suggest that testing marketing material with consumers—via social media or focus groups—should be part of the IMC interactivity dimension. This allows for better understanding of target group preferences. Second, target group integration—

broadening product offerings to attract wider audiences—should be part of IMC strategies to reach more customers and increase profits.

Managerial Implications

For practitioners, our findings highlight several actionable insights for managers in the entertainment industry. First, actively leveraging FOMO (fear of missing out) should become a core element in campaign design. By intentionally crafting marketing communication that stimulates anticipation and urgency, companies can help reduce consumer uncertainty, making it more likely that potential customers will proceed with a purchase. Furthermore, the concept of BrandCebo demonstrates that strong brand messaging can create a psychological placebo effect—amplifying consumers’ perceived enjoyment and value of the event or product. Managers should therefore prioritize pre-event hype and foster positive expectations, as these tactics can boost both sales and attendee satisfaction.

Additionally, the study highlights the potential of using mystery and controlled uncertainty in marketing strategies, provided it aligns with the brand’s image and values. Rather than dispelling all ambiguity about the experience, leaving some elements to the customer’s imagination can drive curiosity and engagement. Managers should carefully balance transparency and intrigue to suit their specific target audience.

Another key implication is the need for flexible branding approaches. For many entertainment offerings, the product or event brand may be more influential than the company brand itself. Managers should consider developing individualized branding strategies for each experience good, rather than relying solely on overarching corporate branding.

In terms of marketing communication, the importance of IMC is reaffirmed: managers should ensure consistent messaging across all relevant channels, and actively test marketing material through direct consumer interaction, e.g., via social media feedback or focus groups. This interactive approach not only strengthens IMC effectiveness but also serves as real-time market research, helping managers fine-tune their messaging. Finally, the identification of “quiet word of mouth” underscores the importance of building strong brand equity and visibility, as market perception can attribute success to brands even when they are not directly involved. Managers should nurture and monitor their market position to harness the benefits—and manage the risks—of this effect.

Limitations and Future Research

As a qualitative study in one regional market, the findings are context-specific and should be generalised cautiously. Future research could test the identified novel tactics quantitatively across industries and markets; investigate how digital analytics can capture and measure “quiet WOM”; and explore longitudinal IMC effects in entertainment to assess long-term brand equity impacts.

References

- Anantachart, S. (2005). Integrated Marketing Communications and Market Planning. *Journal of Promotion Management*, 11(1), 101–125.
- Balan, A., & Krupa, O. (2024). Analysis of Modern PR Strategies in the Show Business Industry. *Socio-Cultural Management Journal*, 7(1), 126–143.
- Hede, A., & Kellett, P. (2011). Marketing communications for special events. *European Journal of Marketing*, 45(6), 987–1004.
- Hershey, L. (2005). The Role of Sales Presentations in Developing Customer Relationships. *Services Marketing Quarterly*, 26(3), 41–53.
- Hutton, J. G. (1996). Integrated marketing communications and the evolution of marketing thought. *Journal of Business Research*, 37(3), 155–162.
- Kerr, G., Schultz, D., Patti, C., & Kim, I. (2008). An inside-out approach to integrated marketing communication: An international analysis. *International Journal of Advertising*, 27(4), 511–548.

- Kimmel, A. J., & Kitchen, P. J. (2014). WOM and social media: Presaging future directions for research and practice. *Journal of Marketing Communications*, 20(1-2), 5–20.
- Kitchen, P. J., & Burgmann, I. (2010). *Integrated Marketing Communication*. Wiley International Encyclopedia of Marketing.
- Liu, X., Shi, S. W., Teixeira, T., & Wedel, M. (2018). Video Content Marketing: The Making of Clips. *Journal of Marketing*, 82(4), 86–101.
- Luck, E., & Moffatt, J. (2009). IMC: Has anything really changed? A new perspective on an old definition. *Journal of Marketing Communications*, 15(5), 311–325.
- Luxton, S., Reid, M., & Mavondo, F. (2014). Integrated Marketing Communication Capability and Brand Performance. *Journal of Advertising*, 44(1), 37–46.
- Neelamegham, R., & Jain, D. (1999). Consumer Choice Process for Experience Goods: An Econometric Model and Analysis. *Journal of Marketing Research*, 36(3), 373.
- Park, C., & Lee, T. M. (2008). Information direction, website reputation and eWOM effect: A moderating role of product type. *Journal of Business Research*, 62(1), 61–67.
- Phelps, J., & Johnson, E. (1996). Entering the quagmire: examining the “meaning” of integrated marketing communications. *Journal of Marketing Communications*, 2(3), 159–172.
- Porcu, L., Barrio-García, S. del, & Kitchen, P. J. (2012). How Integrated Marketing Communications (IMC) works? A theoretical review and an analysis of its main drivers and effects. *Communication & Society*, 25(1), 313–348.
- Rosario, A. B., Sotgiu, F., Valck, K. D., & Tammo H.A. Bijmolt. (2016). The Effect of Electronic Word of Mouth on Sales: A Meta-Analytic Review of Platform, Product, and Metric Factors. *Journal of Marketing Research*, 53(3), 297–318.
- Rosario, A. B., Sotgiu, F., Valek, K. D., & Tammo H.A. Bijmolt. (2016). The Effect of Electronic Word of Mouth on Sales: A Meta-Analytic Review of Platform, Product, and Metric Factors. *Journal of Marketing Research*, 53(3), 297–318.
- Schöndeling, A., Burmester, A. B., Edeling, A., Marchand, A., & Clement, M. (2023). Marvelous advertising returns? A meta-analysis of advertising elasticities in the entertainment industry. *Journal of the Academy of Marketing Science*, 51(5), 1019–1045.
- Schultz, D. E. (1993). Integrated marketing communications: Maybe definition is in the point of view. *Marketing News*, 27(2), 17.
- Wang, X., Yin, H., & Ma, D. (2023). Understanding consumer reference price behavior in co-branding: from the perspective of a dynamic supply chain. *Electronic Commerce Research*. <https://doi.org/10.1007/s10660-023-09759-5>
- Wu, L., Danko, Y., Chen, F., Yao, X., & Zhang, F. (2022). Mapping the literature of integrated marketing communications: A scientometric analysis using CiteSpace. *Innovative Marketing*, 18(1), 152–167
- Yin, R. K. (2018). *Case study research and applications: design and methods* (6th ed.). SAGE.

SESSION 34.7: SHOCK, STIGMA, AND STORYTELLING

Moderators:

Tyler Burch

Summary Brief

The Brand-as-Verb Phenomenon: When the Brand, the Category, and the Service are One.

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Brand-As-Verb carries implications beyond that of being a neat linguistic trick and a possible compromise of legal trademark protections. The degree to which brand-as-verb indicates a brand as being synonymous with the category is a possible indicator of brand synonymity, brand leadership, and category prototypicality. Further, the brand-as-verb phenomenon itself potentially ties to Service Dominant Logic, both in regard to customer cocreation and the conceptual recognition of the brand's connection with the service it provides or enables, as opposed to the good that might be associated with the brand. Plus, this conceptual link carries potential implications of Construal Level Theory related to the concreteness or abstractness of the brand in regard to the comprehensive product. This presentation is an exploratory discussion, literature review, and proposal of methods with which to analyze brand-as-verb in regard to Brand Synonymity, Construal Level Theory, and Service-Dominant Logic.

Introduction

The “You can Venmo this. You Venmo That” (Venmo, 2025) campaign is just one of the more recent examples of the continuing trend of brands embracing the Brand-As-Verb Phenomenon. Though the phenomenon does carry with it the potential to genericize the brand, an outcome that can endanger trademark protections, there is still the tremendous potential value of perceived brand leadership (Kumar & Jayasimha, 2018), category prototypicality (Romaniuk & Sharp, 2000), and brand synonymity (Kumar & Jayasimha, 2018).

Further, brands deliberately choosing to reject, as in the case of Google, or embrace, as in the case of Federal Express, the colloquial use of their brand names as verbs indicates one of the key principles of Service Dominant Logic, customer cocreation (Vargo & Lusch, 2004) as applied to branding (Merz, He, & Vargo 2009). Plus, the action-oriented nature of services can be interpreted as a manifestation of the central tenet of Service-Dominant Logic, namely, the conceptualization of value arises not from the physical goods related to the brand, but to the services that the brand provides directly or the services that the brand's physical goods enable (Vargo & Lusch, 2004).

Background

This presentation is the continuation of an earlier conference presentation (Barnwell & Shanahan, 2016) focused on Brand-As-Verb concerning Service Dominant Logic (Vargo & Lusch, 2004), the linguistic theories of Clankie (2000 & 2014), and potential trademark implications (Taylor & Walsh, 2002; Shafiulla, 2010; Dery, 2019). Added to these influences and considerations are the insights and implications of Construal Level Theory (Lieberman, Trope, & Wakslak, 2007; Trope & Lieberman, 2010) and brand synonymity, in gauging both consumer conceptualization of concreteness and the degree to which the specific verb use of the brand makes the brand synonymous with the category of which the brand products are a part.

Methodology and Potential Findings

A meta-analysis of current literature, as well as qualitative and quantitative methodologies, is currently being explored to gain greater insight through the collection of data and reveal both academic and managerial applications of Brand-As-Verb. Again, this study is still in the exploratory stages, and audience suggestions and insights are most welcome.

References

Barnwell, R. W., & Shanahan, K. J. (2016, March). The Brand-As-Verb Phenomenon, Our Genericidal Pastime: Searching for the Truth Behind Googling, Xeroxing, FedExing, and Much More. In *Celebrating America's Pastimes: Baseball, Hot Dogs, Apple Pie, and Marketing? Proceedings of the 2015 Academy of Marketing Science (AMS) Annual Conference* (pp. 239–244). Cham: Springer International Publishing.

Clankie, S. M. (2000). Genericization: A Theory of Semantic Broadening in the Marketplace. *Northern Review*.

- Clankie, S. (2013, May). An overview of genericization in Linguistics. In Proceedings of the Second International Conference on Onomastics 'Name and Naming': *Onomastics in Contemporary Public Space*, Editura Mega, Editura Argonaut, Cluj-Napoca.
- Dery, J. M. (2019). *From Photoshop® to Photoshop: Knowing How and When to Protect Your Brand Name* (Doctoral dissertation, Bentley University).
- Kumar, S. M., & Jayasimha, K. R. (2019). Brand verbs: brand synonymity and brand leadership. *Journal of Brand Management*, 26(2), 110–125.
- Lieberman, N., Trope, Y., & Wakslak, C. (2007). Construal level theory and consumer behavior. *Journal of Consumer Psychology*, 17(2), 113–117.
- Merz, M. A., He, Y., & Vargo, S. L. (2009). The evolving brand logic: a service-dominant logic perspective. *Journal of the academy of marketing science*, 37(3), 328–344.
- Romaniuk, J., & Sharp, B. (2000). Using known patterns in image data to determine brand positioning. *International Journal of Market Research*, 42(2), 1–10.
- Shafiulla, B. (2010). Genericization of Trademarks: Brand Name becomes Generic Name-A Challenge for Brand Managers. *Indian Journal of Marketing*, 3–11.
- Taylor, C. R., & Walsh, M. G. (2002). Legal strategies for protecting brands from genericide: Recent trends in evidence weighted in court cases. *Journal of Public Policy & Marketing*, 21(1), 160–167.
- Venmo. (2025, June 4). *Venmo Everything* [Advertising campaign]. PayPal–Venmo Newsroom.

Summary Brief

Selling in the Shadows: The Paradox of Promotion in Stigmatized Sectors

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This study examines the advertising paradox faced by firms in stigmatized industries, focusing on the rapidly expanding U.S. sports betting sector. Following a wave of legalization, sports betting companies have increased advertising visibility, creating both market opportunities and reputational risks. Drawing from stigma management theory, legitimacy theory, and advertising effectiveness research, we investigate how message framing (product-focused vs. legitimacy-focused) and advertising channel (mass media vs. targeted digital) influence consumer engagement and public sentiment. Four hypotheses are proposed to test the effects of framing, channel, and consumer involvement on attitudes toward advertising. The study contributes to theory by clarifying how promotional strategies operate under conditions of stigma and to practice by providing actionable insights for balancing market visibility with legitimacy management. Findings are expected to inform sports betting firms and other stigmatized industries on designing campaigns that appeal to core consumers while minimizing negative societal responses.

Introduction

Stigmas occur when external judgments of an individual deviate negatively from perceived norms within a given context (Harmeling, Mende, Scott, et al., 2021). At the market level, stigma reflects an unusually high level of societal disapproval toward a company, product, or industry (Vergne, 2012). Within stigmatized industries, certain product categories can carry an even higher stigma than the industry as a whole (Jonson et al., 2009). Sports betting, as a category within the gambling industry, illustrates this dynamic. It has long been associated with concerns over addiction, corruption scandals, and potential negative effects on social relationships (Intarasuwan, 2025). As a result, sports betting has been the subject of heightened public skepticism and regulatory oversight, marking it as a particularly stigmatized domain within gambling.

Despite these associations, the sports betting industry has expanded rapidly, with the U.S. market alone valued at approximately \$14 billion (Greenberg, 2024). This growth has been fueled in part by a wave of legalization following the 2018 Supreme Court decision striking down the Professional and Amateur Sports Protection Act (PASPA). Legalization has allowed sports betting companies to operate more openly, invest in large-scale marketing campaigns, and enter partnerships with major sports leagues and media outlets. Yet increased advertising visibility brings both opportunity and risk. On one hand, it enables firms to capture market share in a rapidly growing sector; on the other, it heightens the potential for public backlash, especially given lingering moral and social concerns about gambling. Understanding how sports betting firms navigate this tension offers a unique lens into the broader phenomenon of advertising in stigmatized industries, where the imperative to promote products must be balanced against the need to manage social legitimacy.

Literature Background

Marketing in stigmatized industries presents a complex challenge that extends beyond the conventional goals of brand awareness and market share growth. Stigmatized industries, sometimes referred to as “sin industries,” often include sectors such as tobacco, alcohol, gambling, cannabis, payday lending, and adult entertainment (Grougiou et al., 2016). These industries face heightened societal scrutiny because their products are perceived as morally questionable, socially harmful, or associated with health risks (Devers et al., 2009). In such contexts, advertising is not only a tool for stimulating demand but also a mechanism for managing legitimacy and mitigating public criticism (Roulet, 2015). Unlike firms in socially accepted markets, stigmatized brands must balance persuasive marketing with strategies that reduce the salience of stigma-related associations (Srivastava, 2002).

Stigma theory suggests that firms operating under such conditions often engage in impression management to influence how stakeholders interpret their legitimacy (Goffman, 1963). This can involve reframing the product narrative to emphasize lifestyle, entertainment, or social responsibility, rather than the core consumption activity

itself. For example, alcohol brands have used sponsorship of sports events and music festivals to shift attention toward social connection rather than intoxication, while tobacco companies have emphasized harm-reduction products and public health initiatives (Palazzo & Richter, 2005). Similar strategies are visible in the cannabis industry, where firms highlight medicinal benefits and wellness positioning to distance themselves from recreational drug stigma (Humphreys, 2010). These efforts aim to construct a socially acceptable brand image without alienating core consumers who value the stigmatized product's primary attributes.

From a consumer behavior perspective, stigma affects both willingness to engage with a product and the conditions under which such engagement occurs (Mende et al., 2024). Some consumers may avoid stigmatized products entirely due to moral concerns, social identity considerations, or perceived reputational risk (Berger et al., 2016). Others may consume such products privately or selectively to avoid social disapproval, even if they have personal interest or demand for the product (Mishra et al., 2018). In certain cases, stigmatized products can even become status symbols within subcultures, where consumption signals nonconformity or group belonging (Johnstone & Lindh, 2014). Advertising within these markets must navigate these divergent consumer motivations, crafting messages that appeal to target audiences while limiting the potential for wider societal backlash (Aaker et al., 2013). This balancing act underscores the paradoxical nature of promotion in stigmatized industries, where visibility is necessary for growth but excessive exposure can reinforce the very stigma that firms seek to overcome.

Proposed model of relationships

H1a: Legitimacy-focused advertising will be associated with lower levels of negative public sentiment toward sports betting brands compared to product-focused advertising.

H1b: Product-focused advertising will generate higher consumer engagement than legitimacy-focused advertising for sports betting brands.

H2: The interaction between message framing (product-focused vs. legitimacy-focused) and advertising channel (mass media vs. targeted digital media) will influence public sentiment and engagement, such that product-focused messaging performs better in targeted digital channels while legitimacy-focused messaging performs better in mass media channels.

H3: Consumers with higher personal involvement in sports betting will exhibit more favorable attitudes toward product-focused advertising than those with low involvement.

Concluding Remarks

This study offers several contributions to the literature on stigma and strategic marketing communication (Harmeling et al., 2021) by examining how advertising strategies function within a highly regulated and socially contested market. By focusing on the sports betting industry during a period of rapid legalization and increased advertising exposure, the study extends stigma management theory into the context of promotional communication. It integrates insights from impression management, legitimacy theory, and advertising effectiveness research to explore how message framing and channel choice interact in shaping both consumer engagement and public sentiment. The findings have the potential to clarify the boundary conditions under which product-focused versus legitimacy-focused advertising is most effective, contributing to a more nuanced understanding of the stigma paradox in marketing.

From a practical standpoint, the results can guide managers in stigmatized industries as they design advertising campaigns that achieve visibility without amplifying negative perceptions. For sports betting firms, this research can help identify the balance between appealing to core customers and avoiding reputational risks with the broader public. Insights on channel-specific performance may inform media planning, while understanding the role of consumer involvement can improve audience segmentation strategies. More broadly, the study offers actionable guidance for firms in other stigmatized industries, such as alcohol, cannabis, and payday lending, where navigating the tension between growth and legitimacy is critical to sustained success.

References

Aaker, J. L., Brumbaugh, A. M., & Grier, S. A. (2013). Nontarget markets and viewer distinctiveness: The impact of target marketing on advertising attitudes. *Journal of Consumer Psychology*, 9(3), 127–140.

- Berger, J., Sorensen, A. T., & Rasmussen, S. J. (2016). Positive effects of negative publicity: When negative reviews increase sales. *Marketing Science*, 29(5), 815–827.
- Devers, C. E., Dewett, T., Mishina, Y., & Belsito, C. A. (2009). A general theory of organizational stigma. *Organization Science*, 20(1), 154–171.
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Prentice-Hall.
- Greenberg, A. (2024). Sports betting market report. Market Research Group.
- Grougiou, V., Dedoulis, E., & Leventis, S. (2016). Corporate social responsibility reporting and organizational stigma: The case of “sin” industries. *Journal of Business Research*, 69(2), 905–914.
- Harmeling, C. M., Mende, M., Scott, M. L., & Palmatier, R. W. (2021). Marketing, through the eyes of the stigmatized. *Journal of Marketing Research*, 58(2), 223–245.
- Humphreys, K. (2010). *Circles of recovery: Self-help organizations for addictions*. Cambridge University Press.
- Intarasuwan, S. (2025). *The social impacts of sports gambling*. Academic Press.
- Johnstone, M. L., & Lindh, C. (2014). The stigma of purchasing via retail borrowing: Investigating social and personal factors in negative word of mouth. *Journal of Retailing and Consumer Services*, 21(3), 331–338.
- Jonson, K., McGuire, M., & O’Neill, D. (2009). Risk, responsibility, and gambling: A review. *Journal of Gambling Studies*, 25(1), 49–65.
- Mishra, A., Umesh, U. N., & Stem, D. E. (2018). Antecedents to consumer participation in co-creation activities in a stigmatized industry. *Journal of Business Research*, 92, 26–36.
- Mende, M., Bradford, T. W., Roggeveen, A. L., Scott, M. L., & Zavala, M. (2024). Consumer vulnerability dynamics and marketing: Conceptual Foundations and Future Research Opportunities. *Journal of the Academy of Marketing Science*, 52(5), 1301–1322.
- Palazzo, G., & Richter, U. (2005). CSR business as usual? The case of the tobacco industry. *Journal of Business Ethics*, 61(4), 387–401.
- Roulet, T. J. (2015). What good is Wall Street? Institutional contradiction and the diffusion of the stigma over the finance industry. *Journal of Business Ethics*, 130(2), 389–402.
- Srivastava, A., Nasa, J., Satyavageswaran, P., Dubelaar, C., & Nanarpuzha, R. (2024). Advertising stigmatized products: Leverage social norms or break the stigma? *Journal of Business Research*, 183, 114837.
- Vergne, J. P. (2012). Stigmatized categories and public disapproval of organizations: A mixed-methods study of the global arms industry, 1996–2007. *Academy of Management Journal*, 55(5), 1027–1052.

SESSION 34.8: ROLL CREDITS, ROLL DICE: CLOSING DEALS UNDER NEON

Moderators:

Yunus Kalendar

Summary Brief

Critical Evaluation of Decision-Tree Algorithms for Analyzing Motion Picture Box Office

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In the years following the COVID-19 pandemic, a number of major shifts within the motion picture industry have had a wide-ranging impact on the strategies implemented by studios and theater owners. We use supervised machine-learning algorithms—namely, different types of decision-tree methodologies—to analyze eight years of box office revenue and movie reviews—four pre-COVID-19 years (2016-2019) and four post-COVID-19 years (2021-2024). We critically analyze and compare the differences in performance metrics and solutions produced by the different algorithms. We offer insights into strengths and weaknesses of the algorithms for analyzing box office revenue, based on the objective of the analysis and the nature of the data.

Background

One of the industries most negatively impacted by the COVID-19 pandemic was the entertainment industry—especially, motion picture exhibition (Delre and Luffarelli, 2023). Compared to 2019, the last full year before the COVID-19 pandemic, when the motion picture box office revenue exceeded \$11.2 billion in the United States, the U.S. box office recorded ticket sales of over \$8.6 billion in 2024, representing a 25% decline over 2019 (thenumbers.com, Accessed August 14, 2025). This dramatic decline in box office revenue has motivated a wide-ranging reassessment of the strategies implemented by studios and theater owners in the motion picture industry.

Three major shifts have reshaped how executives at motion picture studios and theater owners formulate marketing strategies. The first transformation of the motion picture industry pertains to the length of time a movie is exhibited in theaters. The industry norm prior to the COVID-19 pandemic was a 90 day window. This window has now been reduced to 27 days, on average (Follows, 2023). Because of this dramatic decline, movie studios and theater owners need to make immediate decisions to ensure profit maximization and loss minimization. A second transformation involves a shift from total box office metrics to a more dynamic current measure of the box office decay rate from Week 1 to Week 2. The third transformation involves the changing influences of professional critics' reviewers versus audience (movie goers') reviews (Johnson 2021).

A more accurate insight into how these structural transformations of the motion picture industry impact box office revenue will inform executives in making managerial decision, such as when to increase or decrease the number of screens of a motion picture theater exhibition, whether to increase or decrease the number of days in theaters, and at what point to migrate a move to pay-per-view to maximize revenue.

Box Office and Motion Picture Reviewer Data

Our data involves eight years of box office revenue—four pre-COVID-19 years (2016-2019) and four post-COVID-19 years (2021-2024). We use Rotten Tomatoes' Top Critics scores as our metric of professional critics' ratings and CinemaScore® to measure audience reviews. The Rotten Tomatoes' Top Critics score is a summary representation of the reviews offered by the most influential critics in the industry (https://www.rottentomatoes.com/critics/top_critics, Accessed August 14, 2025). CinemaScore® is an established industry leader in measuring moviegoers' reviews of major films opening on more than 1,500 screens. Since 1978, CinemaScore® has been polling moviegoers on opening weekend to calculate a letter grade score (A+, A, A-, B+, etc.). CinemaScore® ratings are proprietary and are not published unless agreed by the client (<https://www.cinemascore.com/>, Accessed August 15, 2025).

Besides the box office variable (percentage decline in box office revenue between Week 1 and Week 2) and the key predictor variables (the Rotten Tomatoes' Top Critics scores and the CinemaScore® ratings), we included four control variables in our analyses—namely, Year (movie release year), Screens (percentage increase/decrease in

the number of screens from Week 1 to Week 2), and Long weekend 1 and Long weekend 2 (binary variables representing presence of a long weekend in Week 1 and/or Week 2).

Method and Results

We analyzed the data using supervised machine-learning algorithms—namely, different types of decision-tree methodologies—and evaluated the performance of the different algorithms. Decision-tree methods are based on separating cases into subgroups (nodes) by creating splits on predictors. These splits create logical rules that are transparent and easily understandable. The identified subgroups are more homogeneous on the outcome variable.

We evaluated the C&RT (classification & regression trees) and CHAID (chi-square automatic interaction detector) algorithms for a range of values of relevant hyperparameters, comparing their performance. C&RT algorithms implement recursive partitioning procedures such that the data are divided into two subgroups at every step based on information (entropy) metrics. The CHAID (chi-square automatic interaction detector) method offers another decision-tree algorithm that explores interactions between variables to identify the best predictors of an outcome. Unlike the C&RT algorithm, the CHAID algorithm can divide the data into more than two subgroups at every step, based on statistical significance evaluated with chi-square tests for independence. The outcome variable for all algorithms was the decline rate of box office revenue from Week 1 to Week 2. We critically analyze the differences in performance metrics and solutions produced by the different algorithms and hyperparameter values. We offer insights into strengths and weaknesses of the algorithms for analyzing box office revenue based on the objective of the analysis and the nature of the data.

References

- Basuroy, S., Chatterjee, S., & Ravid, S. A. (2003). How critical are critical reviews? The Box office effects of film critics, star power, and budgets. *Journal of Marketing*, 67(4), 103–117. <https://doi.org/10.1509/jmkg.67.4.103.18692>
- Chisholm, D. C., & Norman, G. (2006). When to Exit a Product: Evidence from the U.S. Motion-Picture Exhibition Market. *American Economic Review*, 96(2), 57–61. <https://doi.org/10.1257/000282806777212440>
- CinemaScore. (n.d.). Retrieved August 14, 2025, from <http://www.cinemascore.com>
- Delre, S. A., & Luffarelli, J. (2023). Consumer reviews and product life cycle: On the temporal dynamics of electronic word of mouth on movie box office. *Journal of Business Research*, 156, N.PAG. <https://doi.org/10.1016/j.jbusres.2022.113329>
- Eliashberg, J., Elberse, A., & Leenders, M. A. A. M. (2006). The motion picture industry: Critical issues in practice, current research, and new research directions. *Marketing Science*, 25(6), 638–661. <https://doi.org/10.1287/mksc.1050.0177>
- Follows, Stephen (2025). The shifting economics of theatrical cinema and what it means for the film business. StephenFollows.com - Using data to explain the film industry. <https://stephenfollows.com/p/the-future-of-theatrical-cinema>
- Johnson, M. J. (2021). Hollywood survival strategies in the post COVID 19 era. *Humanities and Social Science Communications*, 8, 100. <https://doi.org/10.1057/s41599-021-00776-z>.
- Liu, Y. (2006). Word of mouth for movies: Its dynamics and impact on box office revenue. *Journal of Marketing*, 70(3), 74–89, 2006. <https://doi.org/10.1509/jmkg.70.3.074>
- Shukla, A., Yadav, A., & Sharma, S. K. (2022). Predicting movie ticket sales using google trends: Implication of big data analytics. *IUP Journal of Management Research*, 21(1), 23-31. Retrieved from <https://www.proquest.com/scholarly-journals/predicting-movie-ticket-sales-using-google-trends/docview/2659302027/se-2>
- Top Critics. (n.d.). Rotten Tomatoes. Retrieved August 14, 2025, from https://www.rottentomatoes.com/critics/top_critics

SESSION 34.9: FROM SANDBOX TO SPOTLIGHT: EXPERIENTIAL TEACHING IN AN AI SEMESTER

Moderators:

Luke Liska

Summary Brief

Get in Learner, We're Going Shopping: Experiential Learning through a Marketing Communication Retail Immersion Project

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While the importance of field-based experiential learning is widely espoused by marketing educators, there is a relative paucity of providing such learning via short-term projects. To address this gap, this article describes the design and implementation of a Marketing Communication Retail Immersion Project and the student reflections that emerged from it. Findings indicate that the project helps students in identifying real-world application of course concepts, acquiring a greater understanding of the importance of marketing communication for brands, improving in-store attention, and experiencing eye-opening moments of learning. Students also reported appreciating the novelty of the project and how they found it to be a useful marketing exercise.

Introduction

While marketing pedagogy has long recognized the value of experiential learning (Frontczak, 1998; Frontczak & Kelly, 2000), recent work has pointed to the relative paucity of short-term field-based projects that are easy to implement and are relatively more accessible to all students (Schaller, 2020). Given the wide variety of brick-and-mortar stores conveniently within reach for many college students, a retail immersion project serves as an easily implementable example of such a project. Consequently, this project describes the design and implementation of a MarCom (Marketing Communication) Retail Immersion Project. As part of this project, student groups conduct retail immersion visits to document and reflect on different examples of in-store marketing communication techniques. In line with Kolb's (1984) experiential learning theory, the ability of the project to incorporate real-world observation and subsequent reflection provides a clear pathway for students to understand in-store applications of theoretical course concepts.

Background

A key pedagogical conduit for fostering experiential learning is the incorporation of field-based activities or projects as part of marketing courses. Field-based learning typically requires exposing students to real-world settings beyond the classroom to facilitate learning through direct interaction. Doing so often leads to a greater level of understanding among students and an added appreciation of how course concepts come to life in the actual world around them (Loneragan & Andresen, 1988). In terms of design and implementation, moreover, instructors can choose between incorporating long-term or short-term field-based projects. Long-term projects typically require greater investment of time, effort, and sometimes, even money. Examples of such projects within marketing education include learning experiences such as internships, study abroad programs, structured site visits, and networking projects (Black et al., 2023; Duke, 2000; Van Doren & Corrigan, 2008; Weible & McClure, 2011). Short-term projects, in contrast, are easier to implement as they do not require long time horizons and are therefore more accessible and appealing to both instructors and students. Recent work on the efficacy of a marketing scavenger hunt, for instance, served to highlight the benefits of incorporating short-term field-based projects while also pointing to the relative dearth of such projects within marketing education (Schaller, 2020).

The Innovation

Given that a central focus for marketing communication courses is to help students learn about different promotional techniques (e.g., advertising, sales promotions, point-of-purchase, direct marketing, personal selling, etc.), an immersive field-based project is particularly helpful in fostering experiential learning. While college students frequently visit a variety of retail stores, many may not realize the scale and scope of marketing communications used inside such stores. To that end, the MarCom Retail Immersion Project can help students: (a) Observe the most recent iterations of marketing communication techniques used in brick-and-mortar retail; (b) Solidify their understanding of key course concepts; and (c) Gain an appreciation for the role played by marketing communication for different brands. From a pedagogic standpoint, this aligns with two critical course objectives for

a marketing communication course: (a) To be able to identify different marketing communication techniques; and (b) To understand the relative advantages of using these different techniques.

Student objectives for the project include: (a) Selecting a retail store to visit with their academic group; (b) Documenting examples of marketing communication techniques; and (c) Providing a written reflection paper on the experiential learning from the visit. This particular retail immersion project was implemented across two sections of an introductory course in integrated marketing communications at a medium-sized public U.S. university located in the Midwest during one semester. Both sections were taught primarily in a face-to-face format with most of the sessions involving in-classroom instruction. It was introduced as a group project and students in each section were asked to form groups of four to six members. The project represented 5% of the final grade for the course.

Methodology

The project was deployed to both class sections on the same day, and the same instructional document was provided to all students. Reflection papers from all student groups were collected in the form of Microsoft Word documents with each group submitting one document. All groups were instructed to include four elements in their submissions: (a) Store visit details: Retail franchise name, visit date(s), and group/sub-group membership; (b) Pictures of marketing communication techniques accompanied by short identifying captions; (c) Group response to collective reflection prompts (e.g., “How do you think in-store marketing communication supports the overall marketing strategy for brands (refer to at least two specific examples from your set)?”; and (d) Separate responses to the individual reflection prompts (e.g., With reference to one specific example of marketing communication that you documented, what was one key learning moment for you in terms of marketing knowledge?). The collective and individual reflections, therefore, represent the corpus of qualitative data collected as part of this project. Data analysis was conducted through a process of open coding and emergent theme development (Charmaz, 2008; Miles & Huberman, 1994) wherein key themes were extracted from the data to reflect commonalities across different student experiences.

Findings

Findings indicated that the project helped students in correctly identifying different marketing communication techniques when they saw how these techniques had been executed by different brands inside retail stores. Additionally, as students had to document a variety of promotional efforts, they also acquired a greater appreciation of the effort that goes into conceptualizing and developing a marketing communication strategy. Given the clear project objective shared with students during the deployment phase, student reflections indicated a general sharpening of attention during the visit and a heightened awareness of different forms of marketing used within stores. Students also talked about eye-opening experiences of surprise as they would have moments of realization linked to the different types of marketing communication they observed. Finally, student reflections also highlighted the benefits stemming from the experiential novelty of the project and how it was completely different from anything they had done before.

References

- Black, H. G., Milovic, A., & Dingus, R. (2023). A foot in the door: A customizable networking project. *Marketing Education Review*, 33(2), 130-135.
- Charmaz, K. (2008). Grounded theory as an emergent method. *Handbook of emergent methods*, 155, 172.
- Duke, C. R. (2000). Study abroad learning activities: A synthesis and comparison. *Journal of Marketing Education*, 22(2), 155-165.
- Frontczak, N. T. (1998). A paradigm for the selection, use and development of experiential learning activities in marketing education. *Marketing Education Review*, 8(3), 25-33.
- Frontczak, N. T., & Kelly, C. A. (2000). Special issue on experiential learning in marketing education. *Journal of Marketing Education*, 22(1), 3.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice-Hall.

- Lonergan, N., & Andresen, L. W. (1988). Field-based education: Some theoretical considerations. *Higher education research and development*, 7(1), 63-77.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage Publications.
- Schaller, T. K. (2020). Exploring the marketplace: Scavenger hunts as field-based experiential learning. *Marketing Education Review*, 30(2), 118-124.
- Van Doren, D., & Corrigan, H. B. (2008). Designing a marketing course with field site visits. *Journal of Marketing Education*, 30(3), 189-206.
- Weible, R., & McClure, R. (2011). An exploration of the benefits of student internships to marketing departments. *Marketing Education Review*, 21(3), 229-240.

**SESSION 34.10: MARKETING EDUCATION REVIEW
SPECIAL ISSUE AND SYMPOSIUM II**

Moderators:

Emily Tanner

Summary Brief

A Multi-Year Pathway for Building Student Personal Brands in Marketing Education

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As digital presence and strategic self-presentation become increasingly vital, personal branding is a critical skill for marketing graduates. This paper presents a scaffolded framework for integrating personal branding across four undergraduate marketing courses. Aligned with core marketing competencies, the model develops students' digital identity, career readiness, and networking skills. Flexible and customizable, it fosters student confidence, improved job search self-efficacy, and increased cohesion across siloed learning experiences while addressing the need to balance academic rigor with industry relevance in an AI-driven landscape.

Introduction

Marketing graduates increasingly need personal branding skills to differentiate themselves in competitive job markets (Azad et al., 2024), yet many undergraduate programs address this topic inconsistently (Brocato et al., 2015; Gorbato, 2018). Employers now expect new hires to demonstrate strategic self-positioning alongside technical marketing knowledge (Venciute et al., 2024), skills that align directly with core marketing principles of segmentation, positioning, and brand management. However, students typically graduate without systematic training in applying these concepts to themselves, leaving them unprepared to articulate their professional value proposition or maintain a strategic online presence (Edmondson & Matthews, 2021; Manai & Holmlund, 2015). This curricular gap represents a missed opportunity to reinforce marketing fundamentals while addressing a practical career need (Stanton, 2013). This need for personal branding instruction reflects the broader challenge facing marketing education: ensuring curricula remain relevant to evolving professional expectations while reinforcing core disciplinary concepts (Grewal et al., 2025).

This paper presents a framework for embedding personal branding instruction across multiple levels of the marketing curriculum through a scaffolded, school-branded initiative. Drawing from experience implementing this approach at a mid-sized business school, we explore how personalized branding pathways can be introduced as early as the sophomore year and built upon in successive courses, including business communication, principles of marketing, digital marketing, and a senior capstone or marketing strategy course.

Theoretical and Pedagogical Foundations

The integration of personal branding instruction into the marketing curriculum is grounded in both experiential learning theory and the growing literature on professional identity development in higher education. According to Kolb (2014), experiential learning allows students to translate conceptual knowledge into real-world applications through active reflection, iterative development, and hands-on engagement. Personal branding assignments exemplify this process by encouraging students to apply marketing concepts, such as positioning, differentiation, and audience segmentation, to themselves in authentic, career-relevant ways.

While the pedagogical value of personal branding assignments has gained recognition, most implementations follow what might be characterized as a “snapshot” model, concentrated exercises within individual courses that treat professional identity as a fixed outcome rather than a developmental process. Busch and Davis (2018), for instance, describe a comprehensive personal branding assignment using StrengthsFinder assessments and 360-degree feedback, but this work occurs entirely within a single marketing course with limited opportunity for iteration or evolution. Similarly, Stanton and Stanton (2013) present personal brand statement creation as a discrete assignment that produces a final deliverable rather than an ongoing exploration. While these approaches generate valuable learning outcomes, they could inadvertently reinforce the misconception that professional identity can be “solved” through a single reflective exercise, missing opportunities for students to experience how authentic personal brands emerge through sustained experimentation and market feedback.

The contrast between isolated and longitudinal approaches reflects broader pedagogical tensions around efficiency and depth in curriculum design. Single-course personal branding assignments often attempt to compress identity exploration, strategic positioning, digital execution, and professional networking into compressed timeframes that can overwhelm students and limit authentic engagement. A developmental approach, grounded in Bruner's spiral curriculum theory, allows students to revisit core concepts such as positioning, differentiation, and audience analysis with increasing sophistication across multiple contexts (Bruner, 2009). This distributed practice not only enhances retention and transfer of marketing principles but also mirrors the iterative nature of professional brand management that students will encounter throughout their careers. Rather than viewing personal branding as a discrete skill to be acquired, the scaffolded model positions it as a lens through which students can continuously apply and deepen their understanding of fundamental marketing concepts.

The scaffolding of personal brand development differs fundamentally from traditional academic scaffolding because it involves what Marcia (1980) termed identity exploration and commitment, which are psychological processes that require time for authentic experimentation rather than simply increased cognitive complexity. While conventional scaffolding gradually removes instructor support as students master discrete skills, personal branding scaffolding must simultaneously increase strategic sophistication while providing sustained encouragement for students to take authentic risks in self-presentation. This creates a unique pedagogical challenge: instructors must scaffold not only marketing competencies but also students' comfort with professional vulnerability and self-advocacy, skills that cannot be rushed or artificially accelerated. The extended timeline allows for what might be termed "scaffolded authenticity," where students can experiment with different aspects of their professional identity across low-stakes contexts before committing to higher-visibility platforms or career-defining communications.

At the same time, integrating personal branding into the curriculum creates an opportunity to unify learning outcomes across otherwise siloed courses. A scaffolded, multi-year approach supports the development of core marketing competencies such as positioning, storytelling, and digital analytics through a consistent and personally meaningful lens. This continuity can foster deeper engagement, improve the perceived relevance of coursework, and create a sense of narrative progression in students' professional development. Branding this scaffolded experience at the school level (e.g., under a unifying name or metaphor) can further enhance cohesion, visibility, and institutional identity (Huebner, 2023), encouraging students to take ownership of their professional journey from the outset.

As the role of marketing educators expands to include not only content delivery but also career preparation and professional mentoring, scaffolding personal branding across the curriculum offers a high-impact, customizable strategy. It bridges academic theory and real-world practice, cultivates critical thinking and digital literacy, and supports students' transition from classroom to career in a rapidly changing professional landscape.

Designing a Curriculum Pathway Framework for Personal Branding

At its core, the framework organizes personal branding instruction into four sequential phases aligned with students' academic progression: Foundation, Brand Development, Engagement Strategy, and Professional Launch. Each phase is tied to a course commonly found in business school curricula such as business communication, principles of marketing, digital or social media marketing, and a senior capstone or career development course. This alignment enables students to revisit and deepen their personal branding work in courses they are already required to take, increasing curricular efficiency and reinforcing key concepts across contexts.

Phase 1: Foundation (Sophomore Year – Business Communication)

In the initial phase, students are introduced to the fundamentals of professional self-presentation. The focus of the foundational assignments is to begin building a baseline professional identity while reflecting on the personal brand. Assignments typically include utilizing personality and career readiness tests to better understand oneself; creating and/or updating professional documents such as a cover letter and resume; creating job-related digital accounts including LinkedIn basics; crafting an elevator pitch; practicing proper e-mail, interview, and thank you note etiquette; and reflecting on the personal brand throughout the process. This early exposure serves as the first step in building their professional presence, grounded in personal authenticity.

Phase 2: Brand Development (2nd Semester Sophomore Year or Junior Year – Principles of Marketing)

Building on the foundation and directly applicable to the curriculum, students apply core marketing principles such as positioning, differentiation, segmentation, and brand storytelling to themselves during the second

phase of the personal branding assignment. In this phase, students deepen self-awareness through personal audits (e.g., values-based reflection) and an emphasis is placed on aligning personal strengths and values with industry expectations. Students are introduced to the idea of a value proposition and begin crafting a more intentional narrative around their career direction, tailored to their target professional audience on LinkedIn. Students continue to refine their LinkedIn profile and schedule meetings with acquaintances in their chosen field to implement the skills acquired in the prior phase.

Phase 3: Engagement Strategy (Junior Year or 1st Semester Senior Year – Digital or Social Media Marketing)

In this advanced phase, students explore how to build visibility and credibility within their industry while further building a digital brand across platforms. Students now develop additional digital assets such as a digital marketing portfolio. Students implement course relevant learning such as effective web design and branding to showcase their personal value. Students then market their personal portfolios by creating platform-specific content, using analytics to optimize engagement, and managing their professional reputation through consistent, strategic activity. Other assignments may include content calendars, post analyses, and the use of AI or SEO tools to refine messaging. Students begin to cultivate a digital presence that reflects not only who they are, but also how they want to be known in the professional world.

Phase 4: Professional Launch (Senior Year – Capstone or Career Development Course)

The final phase activates the personal brand students have built throughout their academic journey. Emphasis is placed on applying marketing concepts to update the unique value proposition and position for the specific (i.e., employer) target audience to drive their communication strategy. Students make needed updates to their professional and, especially, digital documents. Students leverage professional networks by growing connections on LinkedIn while preparing targeted content and materials that reinforce students' brands. Other activities may include scheduled content postings, personalized job search strategies, or alumni engagement. This capstone experience helps students connect their academic work to tangible career outcomes.

Curriculum Implementation and Course-Level Integration

Implementing a scaffolded personal branding framework across the marketing curriculum requires coordination among faculty, alignment with course objectives, and clear communication to students about how each phase contributes to their long-term career development. Schools may adapt this structure based on their curriculum design, available courses, or student progression patterns. Moreover, schools can customize the sequence, brand the program in a way that aligns with institutional values, and incorporate industry partners for guest lectures, mock interviews, or resume feedback. Faculty collaboration is key: even small adjustments to assignments can contribute meaningfully to the overall scaffold. When implemented holistically, this model enhances both student development and institutional differentiation by embedding professional brand-building into the academic culture of the business school.

Outcomes and Benefits

Implementing a developmental sequence for personal branding across the marketing curriculum generates meaningful outcomes at multiple levels: students, faculty, and the broader institution. For example, at the student level, effective personal branding leads to greater self-evaluations (self-esteem and general self-efficacy) and develops greater reflexivity through self-awareness, feedback-seeking, and sense-making (Gorbatov et al., 2018). Building on this theoretical foundation, students who participate in a multi-year personal branding sequence are likely to have greater confidence, clarity, and strategic awareness in how they present themselves professionally. Rather than encountering personal branding as a one-time assignment, students experience it as an evolving process, which encourages deeper reflection, a stronger sense of ownership over their professional identity, and is more in line with the realities of marketing careers. Students also benefit from an enhanced digital presence which is easy to neglect as an active college student. By continually updating their personal documents and digital profiles, students are able to create and maintain a consistent, professional online identity aligned with their goals.

Moreover, in undertaking this process of assignments, students can garner greater clarity on their future careers. Students' use of personality and career self-assessments, articulation of elevator speeches and mission statements, and brand positioning exercises can help students connect their academic interests with potential career pathways. Student critical thinking can also be positively impacted. When scaffolded across multiple courses, personal branding requires students to integrate feedback, revise their work overtime, and adapt messaging across audiences and platforms. Research on scaffolding demonstrates that iterative processes with cycles of feedback help

students learn how to improve their work to meet goals, with scaffolded approaches effectively promoting critical thinking skills through the use of prompts (strategic questions, cues, or hints that guide students' thinking), supports (tools, resources, templates, or assistance that help students complete complex tasks), and modeling (demonstrating the thinking process or showing examples of completed work) (Schön, 2017; Browne et al., 2009). Finally, in addition to career readiness, the scaffolded model supports student well-being by normalizing professional uncertainties and providing students with opportunities to explore their personal identity and career goals in a low-stakes process. Using a developmental approach can help reduce job and public self-presentation anxiety and, thereby, contribute to students' overall confidence, motivation, and resilience (Praskova et al., 2015).

Faculty and Pedagogical Benefits

From an instructional standpoint, a scaffolded approach to personal branding creates a cohesive throughline across disparate courses. Faculty can align learning objectives with shared branding milestones and incorporate discipline-specific tools and theories into the framework. There are opportunities for cross-course integration where business and marketing instructors can reinforce key marketing concepts such as positioning, differentiation, and audience engagement through the application of personal branding assignments. Scaffolding the personal branding assignments through the curriculum allows faculty to focus on advancing depth rather than repeating introductory concepts. This approach not only reinforces foundational marketing skills but also enables faculty to design more advanced, engaging assignments that challenge students at higher cognitive levels. It can help reduce the need for reteaching basics, allowing instructors to spend more time on feedback, mentorship, and integration with real-world applications. Faculty can also benefit from the use of the personal branding assignments as an assessment innovation. The personal branding assignments produce a portfolio-style deliverable (e.g., professional profiles, content calendars, and digital business cards, etc.) that offer rich and authentic assessment opportunities over traditional exams or papers. Additionally, faculty report that personal branding assignments often lead to more engaged class discussions, as students see direct relevance to their own professional goals.

Institutional and Branding Impact

When implemented under a school-specific umbrella, whether metaphorical (e.g., "Bridge to Career") or platform-specific (e.g., "Linked[School Name]") this model can also enhance institutional branding and student recruitment. By branding the project in the name of the school, prospective students and employers may view the personalized branding sequence as a unique value proposition as it can signal that the school invests in student development beyond technical instruction. As students in the personal branding program who have cultivated a professional identity tied to their institution may be more likely to stay connected, contribute to networking events (e.g., events that are directly tied to the assignment), or mentor current students in building their personal brand and career aspirations. Schools can also use the student deliverables and outcomes (e.g., samples of portfolios, LinkedIn engagement metrics, job placements) to demonstrate the impact of the program in the school's marketing materials and accreditation reporting. By creating a shared, institutionally branded experience around personal branding, schools can enhance both educational outcomes and school-wide identity in an increasingly competitive higher education landscape. Together, these outcomes suggest that a scaffolded personal branding approach not only benefits students but also enhances faculty engagement and institutional differentiation.

Challenges and Future Directions

While the benefits of a scaffolded personal branding framework are substantial, implementation is not without its challenges. Successfully integrating this model across multiple courses requires thoughtful coordination, faculty buy-in, and institutional support. The scaffolded personal branding framework can be adapted to diverse institutional contexts through strategic modifications to delivery format, resource allocation, and assessment methods. Smaller programs with limited marketing faculty could concentrate the four-phase model into two or three courses, with a single instructor coordinating multiple phases through shared digital portfolios and structured peer feedback systems. Community colleges might adapt the timeline to fit two-year degree structures by integrating phases into general business courses, career planning seminars, and capstone experiences. To support implementation across contexts, institutions could benefit from practical resources including faculty coordination templates that outline learning objectives and assessment criteria for each phase, standardized rubrics that ensure consistency across instructors and semesters, and digital tracking systems that allow students and faculty to monitor progress throughout the multi-course sequence. Programs could establish faculty collaboration protocols such as regular coordination meetings, shared student portfolio reviews, and cross-course assignment calibration to maintain curricular coherence while allowing for individual instructor flexibility and expertise.

Conclusion

In an educational environment defined by disruption, rising employer expectations, and the growing centrality of digital identity, personal branding instruction must evolve from a one-off assignment to a coherent, longitudinal learning experience. This paper presents a scaffolded curriculum framework that integrates personal branding across four key courses in the undergraduate business curriculum, supporting students from updating their resumes to their first LinkedIn profile to their final job search.

References

- Azad, T., Ahmed, S., Shovon, K., Razu, A., Sikder, S., Bhuyan, S. H., & Ahmed, M. S. (2024). Building a personal brand: Strategies for standing out in a competitive job market. *International Journal of Novel Research in Marketing Management and Economics*, 11, 147-154.
- Brocato, E. D., White, N. J., Bartkus, K., & Brocato, A. A. (2015). Social media and marketing education: A review of current practices in curriculum development. *Journal of Marketing Education*, 37(2), 76-87.
- Browne, L., Hough, M., & Schwab, K. (2009). Scaffolding: A promising approach to fostering critical thinking. *SCHOLE: A Journal of Leisure Studies and Recreation Education*, 24(1), 114-119.
- Bruner, J. S. (2009). *The process of education*. Harvard University Press.
- Busch, P. S., & Davis, S. W. (2018). Inside out personal branding (IOPB): Using Gallup Clifton Strengthsfinder 2.0 and 360Reach. *Marketing Education Review*, 28(3), 187-202.
- Edmondson, D., & Matthews, L. (2021). Developing marketing curriculum to make students workforce ready. *International Journal of Educational Management*, 35(5), 969-983.
- Gorbatov, S., Khapova, S. N., & Lysova, E. I. (2018). Personal branding: Interdisciplinary systematic review and research agenda. *Frontiers in Psychology*, 9, 2238.
- Grewal, D., Guha, A., Beccacece Satormino, C., & Becker, M. (2025). The future of marketing and marketing education. *Journal of Marketing Education*, 47(1), 61-77.
- Huebner, C. (2023). Brand experience design for higher education: A review and future directions. *Journal of Brand Strategy*, 11(4), 367-377.
- Kolb, D. A. (2014). *Experiential learning: Experience as the source of learning and development*. FT press.
- Manai, A., & Holmlund, M. (2015). Self-marketing brand skills for business students. *Marketing Intelligence & Planning*, 33(5), 749-762.
- Marcia, J. E. (1980). Identity in adolescence. *Handbook of Adolescent Psychology*, 9(11), 159-187.
- Praskova, A., Creed, P. A., & Hood, M. (2015). Career identity and the complex mediating relationships between career preparatory actions and career progress markers. *Journal of Vocational Behavior*, 87, 145-153.
- Schön, D. A. (2017). *The reflective practitioner: How professionals think in action*. Routledge.
- Stanton, A. D. A., & Stanton, W. W. (2013). Building "Brand Me": Creating a personal brand statement. *Marketing Education Review*, 23(1), 81-86.
- Venciute, D., April Yue, C., & Thelen, P. D. (2024). Leaders' personal branding and communication on professional social media platforms: motivations, processes, and outcomes. *Journal of Brand Management*, 31(1), 38-57.

SESSION 35.3: TEACHING MOMENTS SESSION II

Moderators:

Michelle Sullivan

Jen Riley

Teaching Moment

Invest Now? Gamifying Student Pitches for Engagement and Insight

Kelley Cours Anderson, College of Charleston, USA

This teaching moment introduces a highly engaging pitch evaluation format inspired by Amazon's Buy, Now! show, designed to revitalize student energy and improve feedback quality in marketing project presentations. In many courses—especially those involving campaigns, business ideas, or product proposals—student engagement can taper off during peer presentations. Post-pitch discussions often result in generic applause and little constructive dialogue. The “Invest Now?” Pitch Game reframes the pitch moment as an interactive, game-show style experience that invites participation, critical thinking, and fun.

Prior research has shown that allowing for peer evaluation can enhance student motivation and learning outcomes (Cho & Cho, 2010; Fleckney et al., 2025). In this activity, students present their marketing ideas (e.g., a new product concept, campaign, or branding plan), and classmates act as investors. I used Mentimeter.com shell as an audience response system (ARS; Wood & Shirazi, 2020). After students provide their name for participation points, and then vote live: “Invest Now?” with a simple Yes or No. In addition, participants submit quick qualitative feedback on what was unclear or what might increase their confidence in the pitch. After all groups have presented for the day, a final ranking is conducted based on Product-Market Fit and Potential ROI/Reward.

This structure not only increases energy and attentiveness during peer presentations but also teaches students how to deliver persuasive, targeted pitches and respond to real-time feedback. I received positive feedback when installing this in a Marketing Concepts course following their final group presentations, where student groups presented a new marketing plan for failing Kickstarters. Nevertheless, it works across various marketing courses (e.g., sales, advertising, entrepreneurship, new product development) and is particularly effective in larger classes or shorter class periods where extended Q&A is not always feasible.

The session will share my Mentimeter template, best practices for framing the activity, and student responses to this energetic, feedback-rich innovation.

References

- Cho, Y. H., & Cho, K. (2011). Peer reviewers learn from giving comments. *Instructional Science*, 39, 629-643.
- Fleckney, P., Thompson, J., & Vaz-Serra, P. (2025). Designing effective peer assessment processes in higher education: a systematic review. *Higher Education Research & Development*, 44(2), 386-401.
- Wood, R., & Shirazi, S. (2020). A systematic review of audience response systems for teaching and learning in higher education: The student experience. *Computers & Education*, 153, 103896.

Teaching Moment

Beyond Grades: Recognizing Career-Ready Skills

Svetlana Tokareva, McDaniel College

This proposal introduces an innovative approach to teaching that recognizes and rewards students for career-critical soft skills often overlooked in traditional academic grading. Inspired by the observation that students who may struggle academically often excel in areas such as commitment, creativity, collaboration, and reliability, the initiative involves awarding digital or printed certificates to acknowledge these achievements. The implementation process involves identifying key achievement categories, defining measurable criteria, designing certificates using accessible tools, and presenting the awards during a course-end showcase. These certificates not only motivate students and enhance classroom engagement but also serve as tangible, resume-worthy assets that students can include in portfolios or LinkedIn profiles. The result is a more inclusive and engaged classroom culture, with students gaining tangible recognition for skills that matter in the workforce.

In traditional classroom settings, especially in business and marketing programs, grading often focuses on students' academic performance alone. However, soft skills such as commitment, reliability, creativity, and collaboration are critical for career success but are rarely acknowledged formally. The 'a-ha' moment came when I observed that students who were not top academic performers were excelling in these essential real-world skills. I realized that recognizing these contributions with tangible, resume-worthy certificates could validate their growth and inspire continued effort.

This initiative involves awarding digital or printed certificates for non-academic yet career-critical student achievements. Example certificates include: "Perfect Attendance Award", "Perfect Commitment Award", "Creative Thinker in Marketing", "Team Collaboration Excellence". These certificates are issued at the end of the course and serve as both motivation and a portfolio-enhancing tool for students entering the workforce.

The use of these certificates has transformed classroom culture. Students were more engaged, motivated, and proud of their progress. The certificates highlighted student strengths beyond test scores and gave them a practical way to show professionalism and soft skills to employers. This low-cost, high-impact strategy created a more inclusive and growth-oriented learning environment.

Teaching Moment

Turn Your Exams into Fun Scavenger Hunts: An Example with a Retailing Management Course

James Blair, Eastern Kentucky University, USA

Students can have negative connotations with exams. Sometimes it can be more difficult to assess higher levels of learning through these more traditional forms of assessing student knowledge. One way to alleviate these negative student perceptions and assess student learning in a new way is by converting exams into scavenger hunts. Experiential learning opportunities have been viewed positively by students as fun and helpful to their learning (Blair, 2021). Scavenger hunts have been utilized with other areas of business, like finance (Hasson, 2023) and studying business abroad (Kendall et al., 2020).

In a retailing management course students can show understanding of concepts by finding them in actual stores, apply retailing strategies to recommend changes to what retailers are currently doing, and create content that may be more effective to implement. This includes having students remember concepts from previous readings and activities, demonstrate an understanding of concepts and strategies covered by identifying them in the marketplace, applying their knowledge by recommending changes to the current situation of the retailer, and creating content for the retailer to utilize that solves problems they are facing or overcoming challenges in their current situation.

With these retail scavenger hunts students are provided a list of concepts and strategies to find. They are required to visit at least one retailer and cannot repeat retailers over the course of the semester. This allows them to experience a variety of retailer types and apply concepts to different retailing situations. Students take a picture of the retailers they visit and provide their address, so the instructor is knowledgeable about what locations the student visited. The students work through the scavenger hunt replying to questions, providing pictures of concepts and strategies they have identified at the location, adding additional recommendations for changes the retailer needs to make moving forward, and creating content for the retailer to utilize in the future. This creates a more interactive learning process for students where they can test their knowledge of concepts and explore.

With retailers continuing to adapt in an everchanging consumer marketplace, this scavenger hunt activity provides instructors a tool that can foster student interest in retailing careers in the store as managers or at the corporate level directing overall strategies of the firm. Additionally, this provides instructors an alternative way to assess student learning from traditional exams. Instructors are still able to test for a variety of learning levels through this process. It also gets students exposure to more strategies and concepts being applied in the marketplace today by visiting a variety of retailers over the course of the semester. Future research could measure the effectiveness of this assignment as well as assess a variety of learning outcomes. With retailers looking to get more students working for them in the future, it could also be measured how effective this assignment is in raising student interest in pursuing careers within retailing. We are observing more fluid consumers in the marketplace. These are individuals who have access to mobile, smart technology. This allows them to search for more products, information pertaining to them, and receive communications about products, brands, and companies (Blair, 2019; Correia, 2016). Having this assignment involve the digital space would allow students to apply retailing concepts to ecommerce. Additionally, with corporations having more gig workers, automation, and robotics, students experiencing these retailing experiences firsthand will allow them to better understand consumer behavior and firm strategy incorporating these unique changes happening in the marketplace (Blair 2016, Davis 2016).

References

- Blair, J. (2016). Gerald Davis, The vanishing American corporation (2016). *Markets, Globalization & Development Review*, 1(2), 1-11.
- Blair, J. (2019). Book Review: The fluid consumer: Next generation growth and branding in the digital age. *Journal of Macromarketing*, 39(3), 341-345.

- Blair, J. (2021). Positive implications of weekly marketing entrepreneur pitch competition assignments. *Journal for Advancement of Marketing Education*, 29, 1-11.
- Correia, T. (2016), *The Fluid Consumer: Next Generation Growth and Branding in the Digital Age*. Philadelphia, PA: Kogan Page.
- Davis, G. (2016). *The vanishing American corporation: Navigating the hazards of a new economy* (Vol. 16). Berrett-Koehler Publishers.
- Hasson, B. K. (2023). Scavenger hunt: An experiential learning assignment. *Journal of Case Research and Inquiry*, 8, 275.
- Kendall, W. R., Kendall, L. K., & Hsu, T. (2020). Developing scavenger hunts to maximize the impact of study abroad in business. *Journal of Business Studies Quarterly*, 10(1), 1-11.

Teaching Moment

Consumer Behavior Concepts in Action: Create a PSA Marketing Campaign

Beth DuFault, Ph.D. University of Portland USA.

Experiential Learning: Designing Persuasive Public Service Campaigns

BACKGROUND: In this semester-end experiential exercise, students synthesize key concepts from a semester-long Consumer Behavior course by designing persuasive public service announcement (PSA) campaigns. Working in teams, students identify a social issue that resonates with their values or communities and debate its significance through the lens of consumer behavior theory. Each team selects four core course concepts (e.g., perception, motivation, social influence, identity) and applies them to the strategic design of their campaign.

Before launching their PSAs, students develop and post pre-campaign surveys on the learning management system to gauge classmates' baseline attitudes. Over two digital lab sessions, they then bring their campaigns to life using Canva, applying digital storytelling skills to craft emotionally resonant, visually engaging PSAs. After presenting their work in class, they administer post-campaign surveys to measure shifts in audience perception and understanding. Students may choose any combination of media outlets for PSA deployment: TikTok, Facebook, Instagram, and/or posters. Teams conclude by teaching the class how and why their chosen consumer behavior concepts were deployed. A final, instructor-designed survey invites students to evaluate the persuasive effectiveness of each concept across all campaigns, reinforcing conceptual mastery through application/feedback/reflection.

INITIAL STUDENT HANDOUT (Detailed rubric and component deliverables to follow)

This is your chance to take what you've learned all semester about consumer behavior and put it to work in the real world. In teams, you'll choose a social issue that matters to you and create a persuasive Public Service Announcement (PSA) using concepts from our course and your digital design skills. You'll test your PSA's effectiveness by surveying your classmates before and after your campaign.



Objectives: By the end of this project, you will

- Apply four core consumer behavior concepts to real-world messaging.
- Use survey design to measure consumer attitudes and shifts in perception.
- Collaborate using Canva to produce a professional-quality PSA (your choice: TikTok/Facebook/Instagram/Posters—or something else!).
- Teach your peers how consumer behavior theory works in persuasive communication.

Tips for Success

- Pick an issue you genuinely care about.
- Make sure your PSA *shows* your concepts in action—not just tells.
- Be strategic in survey design
- Use your creativity! Humor, empathy, surprise, and clarity are all welcome tools.

Today:

- Internal: Spend five minutes thinking individually about issues that matter deeply to you. List at least five.
- External: Meet with your group. Compare your topics. Decide upon one issue to focus on as a group.

Teaching Moments

Assessing the Use and Efficacy of Generative Artificial Intelligence (AI) Programs in the Classrooms: Priming Hallucination in Large Language Models.

Jeffrey J. Risher, Southeastern Oklahoma State University

Generative AI programs, particularly Large Language Models (LLM) such as ChatGPT or Claude, have been a widely debated topic in Higher Education for the past several years. Many professors are completely against adopting AI use in the classroom, while others believe that we should welcome the opportunity to teach ethical use of such programs. Protagonists argue that these tools are part of the modern business environment, so students that do not learn to use the correct tools in the correct manner will be unprepared for the workforce.

Conversely, those opposing the use cite the inability to curb academic dishonesty, the reduction in critical thinking involved, as well as the widespread dissimulation of misinformation generated by machines. Such programs use stochastic predictions to generate the most likely response based on repetition rather than accuracy. If no information exists, many are designed to hallucinate, or use semantic capability and sentiment analysis to create a false narrative in the expected tone. Often, AI programs will create false citations if no available references exist. Most generative AI programs have warning labels near the output stating that the accuracy of the response cannot be verified and the user should use caution when accessing the output. Regardless of the potential for incorrect information, students routinely use these programs without questioning the efficacy or plausibility of the answers or even the validity of the cited sources.

This teaching moment is designed as a project-based way to introduce students to the potential pitfalls of blindly trusting LLM-based programs by showing them in real time how these programs are only as good as the information sources that they can access. The project has five sequential steps, and the student must submit each step before being able to see the next. The first step involves library research in which the students must use peer-reviewed sources to define hallucination in a machine learning context. In the next three steps, the students are directed to use the current free version of ChatGPT to generate the answers to questions that they have already answered over the course of the semester: an advanced topic in which the system will likely have quality information to access, an undergraduate-level statistical problem that involves multiple steps, and a basic question requiring little cognitive ability for which it would have virtually no information. For each step, the students are asked to evaluate the answer, then instruct the program to regenerate a different response. This allows the students to see how much the answers may vary for the same question. In the final step, students are asked to opine on their experience with ChatGPT relative to their experience and expectations before the project.

The complete project allows students to see what generative AI programs can and cannot do. Students responded positively to the project in general. Many stated that they did not know that ChatGPT was capable of simply fabricating responses. Others stated that they were shocked at how accurate the program could be with details based on just names and hometown locations. Others still said they learned to coax the system to provide more accurate information by adjusting the prompts and being more specific with the statements. Nearly all of them learned that AI systems are designed with different capabilities and limitations. Thus, no single generative AI system can be used to solve all problems.

Part 1: Students are told to use peer-reviewed journal articles to define hallucination in the context of machine learning systems.

Part 2: Students are provided with information on how to log into the desktop version of the current freely available version of ChatGPT. They are told to enter the following question, then copy and paste the exact response directly into the Canvas text box:

“In the context of machine learning, what is hallucination? Why does it happen? Why is this bad? Can this be good? What does statistical analysis have to do with hallucination?”

In the next box, students are asked to determine if they thought the answer was correct. Once this is submitted, they are instructed to force the system to regenerate the response. They are asked to copy and paste the exact response into the next space. Once they have done this, they are asked if the second response is correct, and whether or not the system improved the answer in the second attempt.

Part 3: In this part, students are given a simple table with two columns of ten numbers. They are told to ask the system to provide the correlation between the columns and explain how to calculate the answer. They were instructed to copy the output exactly as it appeared and paste it into the text box. They were next asked if the answer was correct. Then they were told to regenerate the response, determine if the second answer was correct, notate how much the output differed. Then they were asked to share their thoughts on the process.

Part 4: In this part, students were instructed to prompt ChatGPT to write a narrative about them using only their name, hometown, and education status (i.e., Joe Student, MBA from Hometown, OK). They were then asked to express how accurate the narrative was, how specific the details were, and what they thought of the output. Students were not expected to repeat this step as it was assumed that the narrative would be the product of hallucination.

Part 5: Students were asked to briefly summarize their experiences with this project. They were to include whether they were surprised, disappointed, or amused. They were also asked to state what they learned from the experience and if it affected their intention to use generative AI platforms in the future.

Teaching Moment

Bridging the AI Knowledge Gap in Marketing Education

Joie Hain, Clayton State University, USA
Anita Whiting, Clayton State University, USA
Courtney Peters, Samford University, USA

In the spring of 2025, a survey of business students was conducted at two universities in the southeastern United States, representing both a public and a private university. In this teaching moment one specific and interesting result will be addressed. The survey included several questions and one of the posed questions was “How familiar are you with AI technology?”, rated on a 5-point Likert scale ranging from not familiar at all (1) to extremely familiar (5).

A surprising and key finding was revealed. Responses showed a divide in students’ self-reported familiarity with artificial intelligence (AI). Of the respondents taking the survey, 48.2% felt very familiar or extremely familiar with AI while 49.2% felt little or somewhat familiar with AI. This nearly even split indicates that as marketing educators, we cannot assume AI literacy in our students.

For faculty, this represents an important teaching moment. As AI tools continue to be incorporated into the marketing industry as well as in the marketing curriculum, we cannot assume a level of knowledge exists in our students. Instead, we need to provide learning opportunities to create a solid foundation and common knowledge for all students.

Therefore, this teaching moment will highlight:

- Free AI industry certification opportunities suitable for undergraduates
- Examples of introductory exercises that can build familiarity with AI and can be incorporated into existing assignments

In conclusion, by leveraging data-informed teaching strategies, this teaching moment aims to equip marketing educators with strategic teaching tools to build AI digital literacy in marketing students.

Teaching Moment

Bringing Product Development to Life through a Party Game Project

Caitlin Michael, Saint Vincent College, USA

Overview

For this project, you are going to be creating a game for young adults (i.e., card games, board games, interactive games) and an accompanying marketing plan. The fine print? You will actually be creating the game, and we will play each group's game during our final exam meeting time! Hence, you want the game you design to be something you can realistically put together. You do not need to purchase supplies – blank boards, cards, dice, and player pieces will be provided to you at no cost. As you move through each stage of the product development process and the creation of your marketing plan, please review the required elements. Note that you must cite all sources used in your research; please keep in mind that output from AI is not considered a reliable source – you must check the links provided by any AI tools used for accuracy.

Required Elements

1. **Situation Analysis – External Environments.** Looking at the market for party games, summarize its size, growth, and any macro-environmental forces that are impacting it. You should also consider the threat of new entrants, the rivalry among existing firms, and the threat of substitute products.
2. **Type of Game and Partnering Organization.** Based on your findings from the situation analysis, determine the type of game (i.e., board, card, etc.) you wish to develop and justify your reasoning. You should also select one of the organizations you identified as a partner and explicitly state why this partner would be a good fit. *Hint: look at their mission/vision/current offerings.*
3. **Consumer Analysis and Target Market Selection.** Identify three potential consumer segments of young adults for your game. For each segment, include: a segment name, a description of segment characteristics, and an overview of what features/benefits appeal to each group. From your potential segments, select one to be your target market using the criteria of effective segmentation we discussed.
4. **Product Concept and Comparison.** Provide a detailed overview of the game you wish to create, including the name and how it is played (i.e., number of players, materials needed, rules). Identify the 'next-best' substitutes for your product that your target market may consider purchasing.
5. **Concept Testing – Survey and Analysis.** Using the template from class, create and launch your concept testing survey. You should plan to collect responses from fellow students, friends, and family. When your data collection is complete, summarize your findings using the analysis template.
6. **Creation of Prototype and Analysis of Alpha/Beta Testing.** Using the feedback gathered in the product concept testing survey, create a prototype of your game. You should strive to make this prototype as close to the "final" product as possible in terms of rules/playing experience.
Alpha Testing – As you play your game, note the overall experience and any problems/questions/confusion you experienced. Remember to address these issues *before* moving forward to beta testing and to summarize any changes you incorporate.
Beta Testing – Observe others playing your game and report your findings. Include the general feedback from those who tested your game, whether the gameplay experience aligned with your expectations, and if there were remaining adjustments you needed to make. At this stage, you can now put together your final product to be played during our final examination.
7. **Strategies for Place, Price, and Promotion.** Outline your strategies for place, price, and promotion. Be sure to justify these decisions based on your research and findings from all previous elements.

Teaching Moment

The Extra Credit Paradox: Challenging an All-Too-True Truism by Inviting Resistance

R. Wixel Barnwell, Longwood University, USA

The Challenge

One of the most consistent anecdotal phenomena that many professors experience is the paradoxical truism that the students most likely to do extra credit assignments are those who need it the least. This phenomenon has been attributed to the intrinsic motivation of high achievers (Elbeck & DeLong, 2015), the level of anxiety among top-performing students (Stark, 2020), the difference in time management skills between student communities (Alleveto & Edwards, 2013), the oppositional or compliant nature of the individual student (Raney, 2003), and the student's metacognitive awareness (Myers & Hatchel, 2019). These are just a few of the common suggested causes for this paradoxical situation.

Suggested In-Class Stimulus

Using a blunt but humorous tone, explain the truism to your students and offer the challenge of “prove me wrong.” Delivered correctly, the resistance expressed by many low performing students is invited to express itself in a way that will benefit the students' grades, and they are encouraged to take part in a learning opportunity. Similarly, high-performing students are given the license to direct their valuable time to other uses. Ideally, they would invest in self-care, but likely towards other classes.

Limitations

Though this technique has proven effective in encouraging the completion of assignments on an anecdotal level, the use of this technique for encouraging event attendance is likely to be contraindicated, since often such events reflect on the organizing faculty member. Whether for reasons of intrinsic motivation, academic anxiety, or interest, the high-achieving students are the most likely to attend and stay to the end of the event. Inviting resistance would likely prove ineffective, if not have a perceptible adverse effect.

References

- Allevato, A., & Edwards, S. H. (2013, October). The effects of extra credit opportunities on student procrastination. In 2013, IEEE Frontiers in Education Conference (FIE) (pp. 1831-1836). IEEE.
- Elbeck, M., & DeLong, D. (2015). Exploring the Contribution of Extra Credit in Marketing Education. *E-Journal of Business Education and Scholarship of Teaching*, 9(1), 107–118.
- Myers, C. A., & Hatchel, J. M. (2019). Personality and cognitive factors related to completing extra credit assignments. *International Journal for the Scholarship of Teaching and Learning*, 13(2), 7.
- Raney, D. (2003). Whose Authority?: Learning and Active Resistance. *College Teaching*, 51(3), 86–93.
- Stark, G. (2020). Extra credit and perceived student academic stress.

Teaching Moment

Nudging Bias Awareness in Consumer Decision Making: A Hands-On Choice Architecture Activity for Marketing Students

Gizem Atav, James Madison University, USA

Experiential Exercise

This experiential exercise is part of a broader innovation in my Consumer Behavior (MKTG 385) course, where I'm integrating Transformational Consumer Research (TCR), behavioral nudges, and UN Sustainable Development Goals (SDGs) to make the class more engaging and impactful without adding significant workload. The revisions emphasize hands-on activities that help students explore their own biases, align decisions with societal good (e.g., SDG #12: Responsible Consumption and Production), and become ethical marketers. This low-prep activity builds on an existing slide from the textbook (the consumer decision-making model, showing internal/external influences leading to needs, information search, evaluation, and post-purchase outcomes) to create a relatable, discussion-heavy "aha" moment. It's designed to be fun for students—as consumers themselves—and enjoyable for me, fostering lively shares in our discussion-based format while tying abstract theories to real-world applications like reducing overconsumption.

In this 30-minute in-class exercise, students experience how biases and nudges influence decision-making, using a simple "snack menu" simulation. It's adaptable for any class size, requires minimal setup (print or digital menus), and sparks organic discussions that enrich the session without extra grading—just participation points.

1. Setup (5 minutes). Project the consumer decision-making model slide. Ask: "How do cognitive biases creep into your choices, like opting for sustainable products over impulse buys?" Share a real-world nudge example: Cafeterias using smaller plates as defaults to cut food waste, aligning with SDG #12.
2. Hands-On Experiment (10 minutes). Divide students into small groups (or use polls for larger classes). Provide two "menu" versions (printed handouts or via PollEverywhere/Qualtrics for zero prep): Version A: Neutral list of snacks (e.g., chips, apple, candy bar). Version B: Nudged for sustainability (e.g., apple as default, with prompts like "Most choose this—social proof bias?" or calorie/eco-impact labels). Students "order" individually, then discuss group influences.
3. Debrief and Tie-Back (15 minutes). Reveal results (e.g., more eco-friendly picks in Version B). Connect to course concepts: How does this show perception biases or attitude shifts? Extend to TCR/SDGs: "As marketers, how can we nudge consumers toward responsible choices, like reducing plastic use, without coercion?" Students share personal insights, building self-awareness and critical thinking.

Learning Outcomes and Why It Works

Students gain firsthand bias awareness (e.g., status quo, anchoring), linking theory to practice in an engaging way that empowers them as informed consumers and marketers. It aligns with my focus on societal impact—e.g., applying nudges to UN SDGs—while keeping the class relatable and low-stress. It always energizes

discussions, fits seamlessly into existing lectures, and requires no heavy revisions. Adaptations include AI tools for quick sentiment analysis of reflections or tying to focus group modules for SDG projects with local partners.

References

Leonard, T.C., Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. Yale University Press.

Mick, D. G., Pettigrew, S., Pechmann, C. C., & Ozanne, J. L. (Eds.). (2012). *Transformative consumer research for personal and collective well-being*. Routledge.

United Nations. (n.d.). The 17 Goals. <https://sdgs.un.org/goals>

**SESSION 41.1 PANEL: AI MARKETING FAILURES WE
LOVE TO TEACH: BUILDING STUDENT CRITICAL
THINKING THROUGH DISASTER CASE STUDIES**

Panelists:

Lee Allison

James Blair

Prachi Gala

Karen Hopkins

SESSION 41.2: ANALYTICS, INFLUENCE, AND IDENTITY IN MODERN CONSUMPTION

Moderators:

Velitchka Kaltcheva

Summary Brief

Tipsy Shopping: When Impulsivity Meets Inhibition

Pia A. Albinsson, Appalachian State University, USA
Lucie Ozanne, University of Canterbury, New Zealand
Mohan Menon, University of North Georgia, USA

This study explores the growing phenomenon of online shopping under the influence of alcohol, a behavior that raises concerns about consumer vulnerability, financial well-being, and ethical marketing. Drawing on Transformative Consumer Research (TCR), we examine how alcohol impairs judgment and increases impulsivity, leading to unplanned purchases, post-purchase regret, and financial distress. Using thematic analysis of 4,337 Reddit comments, we identify key psychological, social, and technological drivers of this behavior and discuss implications for consumers, marketers, and policymakers.

Introduction

Shopping is a central cultural and economic activity in the U.S. and globally, with consumer spending accounting for nearly 70% of GDP (US). However, rising debt levels and the ease of online shopping have created a fertile ground for impulsive behaviors, especially when alcohol is involved. While in-store intoxicated shopping is rare, online platforms remove barriers and facilitate impulsive purchases. Retailers have even begun integrating alcohol into the shopping experience, further blurring the lines between leisure and consumption.

Background

Impulse shopping and situational vulnerability are well-documented in consumer research (e.g., Black, 2022; Hill and Sharma 2020) but the intersection of alcohol consumption and digital commerce remains underexplored (Harnish et al. 2023; Menon et al. 2020). Alcohol impairs self-control and alters self-perception, increasing the likelihood of risky financial decisions. Studies show that individuals with high impulsivity or low self-esteem are particularly susceptible. Despite anecdotal evidence and market reports estimating billions spent annually on drunk shopping, we find that empirical research is limited.

Method

We conducted a qualitative analysis of Reddit threads from 2011–2024, collecting over 4,000 comments related to shopping under the influence. Using thematic coding and thematic analysis (Braun and Clarke), we identified patterns in consumer behavior, emotional responses, and shopping platforms. Key codes included intoxication level, sentiment during and after purchase, product type, and whether items were kept or returned. We present five preliminary findings.

Key Findings

The “Drunk Me” Effect: Alcohol lowers inhibitions and impairs judgment, leading to a “who cares” attitude. Consumers often justify purchases as long-desired items or “fun money” splurges. Social Influence: Group settings and peer encouragement can amplify impulsive buying. However, highly social environments may also reduce online shopping due to less phone use. Technological Facilitation: Mobile apps and one-click purchasing make it easy to buy while intoxicated. Platforms like Amazon, TikTok, and Temu are frequently mentioned. Surprise and Regret: Many forget their purchases until they arrive, experiencing a mix of emotions—ranging from joy to embarrassment—depending on the item’s usefulness or cost. Perceived Harmlessness: Despite acknowledging financial impacts, most consumers don’t view drunk shopping as problematic, citing return policies and low costs as justifications.

Discussion and Conclusion

Our findings highlight the role of impaired judgment and digital convenience in facilitating impulsive purchases. The “Drunk Me” persona reflects a temporary shift in self-regulation, often leading to decisions that sober consumers might avoid. While some purchases bring satisfaction, others result in regret or financial strain. Importantly, consumers often rationalize their behavior, minimizing perceived harm. Shopping under the influence is a widespread yet under-researched behavior with significant implications for consumer well-being. As digital retail

continues to evolve, understanding and addressing the psychological and structural factors that drive this behavior is essential. Our study contributes to TCR literature (e.g., Mick et al. 2012) by framing drunk shopping as a form of situational vulnerability exacerbated by digital design and social norms.

References

- Black, D. W. (2022). Compulsive shopping: A review and update. *Current Opinion in Psychology*, 46, 101321.
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative research in sport, exercise and health*, 11(4), 589-597. problematic online shopping. *Psychological Reports*. Advance online publication. <https://doi.org/10.1177/00332941231164348>
- Harnish, R. J., Miller, A. E., & Davis, K. L. (2025). Purchasing under the influence of alcohol: Exploring
- Harnish, R. J., Ryerson, N. C., & Tarka, P. (2023). Purchasing Under the Influence of Alcohol: The Impact of Hazardous and Harmful Patterns of Alcohol Consumption, Impulsivity, and Compulsive Buying. *Psychological reports*, 128(2), 638–677. <https://doi.org/10.1177/00332941231164348>
- Hill, R. P., & Sharma, E. (2020). Consumer vulnerability. *Journal of Consumer Psychology*, 30(3), 551-570.
- Menon, M. (2020) Sip 'N Shop: An Exploration of the Drunk Shopping Phenomenon. 2020 Society for Marketing Advances Annual Conference Proceedings (Virtual). Pp. 94-17.
- Mick, D. G., Pettigrew, S., Pechmann, C. C., & Ozanne, J. L. (Eds.). (2012). *Transformative consumer research for personal and collective well-being*. Routledge.

Summary Brief

Social Comparison and Influencers in Modern Luxury Consumption

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This study extends Social Comparison Theory into the digital domain by examining how motivational orientation, narcissism, materialism, conformity, and need for uniqueness, shape luxury consumers' attitudes toward luxury, social media, and engagement with brands online. Employing a mixed-methods approach, we analyzed a survey of 558 luxury consumers from the United States and Romania and conducted a qualitative discourse analysis of user-generated discussions on Reddit. Results reveal that narcissism and materialism drive favorable attitudes toward luxury, while conformity and uniqueness orientations affect social media attitudes. These attitudes, in turn, positively influence consumer engagement with luxury brands online, creating a reinforcing feedback loop.

Keywords: narcissism, materialism, influencers, social comparison theory, luxury attitude, social media attitude, social media brand engagement

Introduction

The development of digital technologies and social media marketing has exposed consumers to more situations employing and mirroring social comparison with “perfect”, “idealized” social media profiles of friends, family, influencer groups, brand communities, and celebrities, influencing their offline and online shopping behavior and even their well-being (Pillai & Nair, 2021). In the context of luxury brands, these comparisons appear to fuel aspirational desires, prompting calls for deeper inquiry into how online platforms and communities stimulate luxury interest, especially among young consumers (Eastman et al., 2018, 2020).

This study focuses on four key orientations rooted in social comparison processes, narcissism, materialism, conformity, and the need for uniqueness, and investigates how they influence consumers’ attitudes toward luxury and their luxury-related behavior on social media. In doing so, we extend Social Comparison Theory (Festinger, 1954) into the digital consumer behavior domain, proposing that these intrinsic orientations predispose individuals to engage in upward or downward comparisons, which subsequently affect their receptivity to luxury content and online brand interactions. Methodologically, the study employs a mixed-methods, triangulation-focused design to robustly capture luxury consumers' social media behavior.

Literature review and hypothesis development

According to the Social Comparison Theory introduced by Festinger in 1954, consumers evaluate their perceptions, behaviors, and outcomes by comparing themselves to others (Festinger, 1954; Karlsson et al., 2005; Pillai & Nair, 2021). This comparison fulfills the need for self-evaluation, self-enhancement, and self-improvement (Crusius et al., 2022; Elbayoumi & Metwally, 2023) and can lead to peers’ rewards or help avoid disapproval. Social comparison theory offers researchers a valuable perspective for understanding luxury brand consumption and the use of social platforms, as luxury brand consumption primarily aims to conform to the behaviors/choices of reference groups, a concept known as assimilation (Crusius et al., 2022; Pillai & Nair, 2021). Luxury consumption is influenced by personal and social factors (Vigneron & Johnson, 1999; Wong & Ahuvia, 1998), with a stronger emphasis on social influences (Kastanakis & Balabanis, 2012). Factors influencing luxury consumption differ between developed and emerging markets, with social comparison playing a key role (Pillai & Nair, 2021). In this study, we considered consumers’ inclination toward narcissism, materialism, conformity, and uniqueness as independent variables, and consumer attitudes toward luxury, social media, and luxury consumer engagement in social media as dependent variables.

Marketers view narcissism as an essential trait in luxury consumers because it correlates with high materialism scores, leading to a greater desire for expensive products (Kasser & Ryan, 1996; Neave et al., 2020). Previous research shows that narcissists prefer luxurious, exclusive, and flashy items (Sedikides et al., 2007). They are a key target for luxury brands, which they use to attract attention and demonstrate superiority (Fastoso et al., 2018). Studies indicate that narcissists favor publicly consumed brands (Pilch & Górník-Durose, 2017), drawn to luxury items to boost their self-esteem and provoke envy (Campbell et al., 2000; Sedikides et al., 2007).

H1: Narcissism directly and positively influences consumers' attitudes toward luxury brands.

Materialism plays a key role in luxury purchases, with luxury brands traditionally associated with high quality, exclusivity, and prestige, offering substantial emotional and symbolic value (Collela et al., 2019). Expensive luxury goods, linked to material fulfillment, meet the needs of materialistic consumers (Sun et al., 2017). Luxury consumers tend to display wealth, success, and status (Nelissen & Meijers, 2011), with luxury consumption often viewed as ostentatious (Neave et al., 2020). In summary, materialistic values predispose consumers to appreciate and desire luxury brands as status symbols.

H2: Materialism has a direct and statistically significant positive influence on consumers' attitudes toward luxury.

The impact of social conformity on social media marketing has become increasingly relevant with the advancement of technology and the growing diversity of social media platforms and digital influencers. Social conformity manifests online in various ways (Dubois, 2020). People tend to favor those with similar behavior and values, and social networking makes it easy to connect with like-minded individuals (Kaakinen et al., 2020).

H3: Consumers' inclination toward conformity directly and significantly influences their attitude toward social media.

From a theoretical standpoint, SCT suggests that consumers high in NFU will gravitate toward channels that enable them to differentiate themselves (Festinger, 1954; Tian et al., 2001). Online platforms, when employed for creative self-expression and curated personal branding, can fulfill this role.

H4: Consumers' inclination toward uniqueness has a direct and positive influence on their attitude toward social media.

Engagement with luxury brands on social media refers to users' active involvement with luxury brand content, including behaviors such as following brand accounts, liking or commenting on posts, sharing brand-related content, and contributing to brand communities (Eigenraam et al., 2018). Users who find social media entertaining and empowering tend to follow and engage with brands that provide compelling content to share or discuss (Bazi et al., 2020).

H5: Attitude toward social media has a direct and positive influence on consumer engagement with luxury brands on social media.

Social networks encourage constant social comparison and learning from others (Leban et al., 2020), which can reinforce luxury attitudes: luxury consumers on social media often "lurk" to observe what others are buying or wearing, comparing themselves in the process to either affirm their distinct style (value-expressive) or to stay socially competitive (social-adjustive). Consumers who hold luxury in high esteem often view social media as a valuable means to engage with the world of luxury, whether to stay informed about trends, to access insider brand information, or to showcase their own luxury experiences (Muntinga et al., 2011; Park et al., 2018).

H6: The attitude toward luxury has a direct and significant influence on the attitude toward social media.

Consumer brand engagement (CBE) on social media refers to a customer's cognitive, emotional, and behavioral investment in interacting with a brand's online presence (Eigenraam et al., 2018). Prior research indicates that engagement is an antecedent to positive brand attitudes and loyalty behaviors, as engaged consumers develop stronger brand connections (Vivek et al., 2012). From a theoretical standpoint, engagement enriches brand

experience and can shift attitudes in favor of the brand by creating a sense of intimacy and involvement (Vivek et al., 2012).

H7: Consumer engagement with luxury brands on social media platforms has a direct and positive influence on the attitude towards luxury.

Engagement in social media, such as actively posting, sharing, and interacting, is partly driven by social factors, including the influence of norms and peer behavior. In essence, conformity-oriented individuals exhibit visible behaviors online to signal their alignment with group norms and to garner social approval (Yoo et al., 2014). Social comparison theory provides a lens here: those who compare themselves with others on social media may notice the level of activity and popularity of their peers, and in an effort not to fall behind (an upward assimilation motive), they will increase their engagement levels.

H8: The inclination toward conformity has a positive influence on engagement in social media.

Focusing on the United States and Romania, the two cultures present an interesting contrast. By comparing Romania and the U.S., we follow the research tradition of examining luxury attitudes in an emerging market vs. a developed market (Gentina et al., 2016; Gil et al., 2012). Given previous findings, we anticipate differences in overall attitudes toward luxury between the two countries.

H9: Significant differences exist between Romanian and American consumers regarding their attitudes toward luxury.

H9a: Romanian consumers significantly differ from American consumers in their inclination toward narcissism.

H9b: Significant differences exist between American and Romanian consumers in their materialism orientation.

Methodology – Study 1

A questionnaire was used to collect data to test our research model, with scales validated in previous studies or adapted based on a literature review. All scales follow a five-point Likert format. The research was conducted on 1360 respondents (857 Romanian and 503 American). The sample was selected using empirical methods, convenience sampling, and the snowballing technique. The screening process yielded a valid sample of 558 luxury consumers who follow luxury brands on social media.

Four stages were followed to perform the statistical data processing, including reliability and validity tests. In the final stage, the research hypotheses were tested. In this regard, the following statistical tools were used: SEM, Path analysis (H1 → H8), and t-test for independent samples (for research hypotheses H9, H9a, and H9b). The results obtained after testing the H1 → H9b research hypotheses are found in Table 1.

Table 1. Hypothesis Testing Results

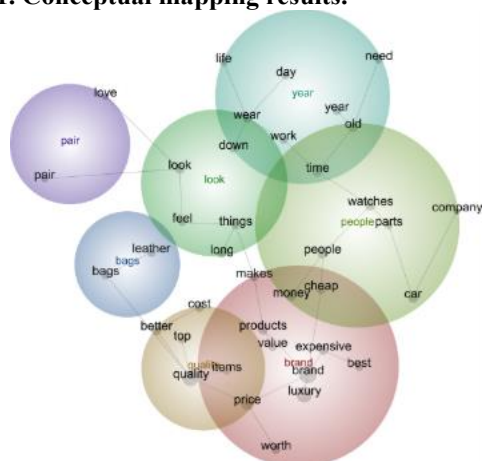
Hypothesis	B	T	p	Result
H1: NAR → LA	235	0.	001	Accepte
H2: MAT → LA	286	0.	001	Accepte
H3: CONF → SMA	261	0.	001	Accepte
H4: UNIC → SMA	196	0.	001	Accepte
H5: SMA → ENG	450	0.	001	Accepte
H6: LA → SMA	286	0.	001	Accepte

H7: LA → ENG	113	0.	-	002	0.	d	Accepte
H8: CONF → ENG	205	0.	-	001	0.	d	Accepte
H9: Country → LA	-	-	5.114	001	0.	d	Accepte
H9a: Country → NAR	-	-	3.282	001	0.	d	Accepte
H9b: Country → MAT	-	-	-0.328	743	0.		Rejected

Methodology – Study 2

To complement the quantitative study and further explore the consumer perceptions and attitudes reflected in Figure 1, a qualitative analysis was conducted to identify and visualize the core sentiments, themes, concepts, and relationships within the textual data. The data analyzed consisted of consumer comments retrieved from Reddit, a widely recognized social media platform valuable for capturing spontaneous and authentic consumer opinions. We focused on three major discussion threads centered on luxury brands and products (posted in 2024–2025) that broadly covered: (a) luxury items considered “worth buying,” (b) luxury brands/products viewed as overrated, and (c) luxury goods perceived as overpriced. This resulted in a dataset of approximately 2,800 comments. A first step in the qualitative analysis was conducted using Leximancer, a software that generated concept maps highlighting prevalent themes and their interrelationships, facilitating a deeper understanding of consumer discourse, as shown in Figure 1.

Figure 1. Conceptual mapping results.



In another step, we employed thematic analysis in NVivo. The NVivo analysis revealed several prominent themes in Reddit luxury discussions, including brand perceptions, price-value, social identity, and product quality. These thematic categories encapsulate the most frequently coded topics and were highly pertinent to the constructs in our quantitative framework. Taken together, the NVivo-generated themes provide a rich triangulation with our earlier quantitative results. Each theme maps onto one or more previously validated hypotheses, offering qualitative evidence of those statistical relationships in action. The brand perceptions and social identity discussions confirm that narcissistic and materialistic orientations manifest in the real world as intense concern for status symbols and social recognition through luxury. The prominence of price/value debates and quality considerations showed that materialism can justify high prices for coveted goods while illuminating how conformity pressures and social comparisons shape consumer feelings about those prices (supporting the role of social comparison mechanisms underlying Hypothesis 3). Meanwhile, the tension between trend-following and uniqueness-seeking in multiple themes substantiates our hypotheses about conformity vs. need for uniqueness (H3 and H4) as dual drivers of luxury attitudes on social media. In light of SCT, the qualitative study underscores that much of the luxury conversation is inherently comparative.

Discussion and Implications

This research makes a significant contribution to marketing theory, particularly Social Comparison Theory (Festinger, 1954), by offering a deeper and more nuanced understanding of the motivational orientations that influence luxury consumer attitudes and digital engagement. Our findings reinforce and expand SCT in the luxury context. Quantitatively, we confirmed that narcissism and materialism are both positively associated with attitudes toward luxury brands, in line with prior studies (Neave et al., 2020; Sedikides et al., 2007; Sung et al., 2017). The study also offers novel theoretical insight into the dual roles of conformity and need for uniqueness in luxury social media behavior. This demonstrates how social media can simultaneously facilitate assimilation and contrast in social comparisons (Festinger, 1954), for example, users compare themselves to aspirational reference groups of influencers by emulating high-status brands (upward comparison conforming to trends) even as they seek distinction by curating unique luxury identities (downward comparison or differentiation). By capturing this duality, the mixed-method approach deepens our theoretical understanding of how conformity and uniqueness orientations jointly operate in online luxury consumption. It suggests that the ubiquity of social media is not antithetical to luxury's exclusivity; instead, digital platforms have evolved to let consumers fulfill both the need to belong and the need to differentiate, through features like customized feeds, exclusive brand forums, and user-generated content that celebrate individual style (Stiglbauer & Kovacs, 2019).

Beyond individual traits, our study highlights the interplay of attitudes and engagement in shaping luxury consumer behavior on social media. The SEM results indicated that a positive attitude toward luxury brands heightens one's receptivity to luxury marketing on social platforms. In other words, consumers who already value luxury are more inclined to follow, appreciate, and seek out luxury content on social media (Jin, 2012; Leban et al., 2020). Another important implication of our study lies in cross-cultural perspectives on luxury consumption. Prior cross-cultural research on luxury often emphasizes differences in cultural values (individualism vs. collectivism) or asserts that luxury meanings are converging globally (Dubois et al., 2005; Stathopoulou & Balabanis, 2019). Our findings offer a fresh angle by showing that divergent consumer orientations (narcissism and materialism in particular) may underlie differences in luxury attitudes between cultures. Quantitatively, we observed that Romanian consumers reported a significantly more positive overall attitude toward luxury brands than American consumers, a somewhat surprising result given the United States' greater purchasing power and mature luxury market. This result nuances the literature on cultural narcissism trends.

Conclusions

This study highlights how consumers' motivational orientations (personal values and personality traits) influence their attitude toward luxury, luxury consumers' attitude toward social media marketing, and luxury consumers' engagement on social media platforms. It also shows that increasing luxury consumers' engagement on social media platforms (such as consuming, sharing, and creating marketing content) strengthens their positive attitude toward luxury. The study emphasizes differences between Romanian and American consumers regarding their attitude toward luxury and their level of narcissism. From a marketing practice perspective, the study provides a clear guide for managers on approaching different market categories, whether developed or emerging markets. Considering the sampling limitations of our study, we recommend expanding the model's testing in a cross-cultural context, including additional in-group analyses, for future research. Additionally, the implications of new technologies, virtual avatars, and AI-based communication can be explored within the context of more extensive moderation and mediation testing.

References

- Bazi, S., Filieri, R., & Gorton, M. (2020). Customers' motivation to engage with luxury brands on social media. *Journal of Business Research*, 112, 223–235. <https://doi.org/10.1016/j.jbusres.2020.02.032>
- Campbell, W.K., Reeder, G.D., Sedikides, C., & Elliot, A.J. (2000). Narcissism and comparative self-enhancement strategies. *Journal of Research in Personality*, 34(3), 329–347.
- Crusius, J., Corcoran, K., & Mussweiler, T. (2022). Social comparison: A review of theory, research, and applications. In D. Chadee (Ed.), *Theories in social psychology* (2nd ed., pp. 165–187). Wiley.
- Dubois, B., Czellar, S., & Laurent, G. (2005) Consumer segments based on attitudes toward luxury: Empirical evidence from twenty countries. *Marketing Letters*, 16(2), 115–128.

- Dubois, D. (2020). Fulfilling social needs through luxury consumption. In F. Morhart, K. Wilcox, & S. Czellar (Eds.), *Research handbook on luxury branding* (pp. 75–91). Edward Elgar Publishing.
- Eastman, J.K., Iyer, R., Shepherd, C.D., Heugel, A., & Faulk, D. (2018). Do they shop to stand out or fit in? The luxury fashion purchase intentions of young adults. *Psychology & Marketing*, 35(3), 220–236.
- Eigenraam, A.W., Eelen, J., Van Lin, A., & Verlegh, P.W.J. (2018). A consumer-based taxonomy of digital customer engagement practices. *Journal of Interactive Marketing*, 44(1), 102–121.
<https://doi.org/10.1016/j.intmar.2018.07.002>
- Fastoso, F., Bartikowski, B., & Wang, S. (2018) The “little emperor” and the luxury brand: How overt and covert narcissism affect brand loyalty and proneness to buy counterfeits. *Psychology & Marketing*, 35(7), 522–532. <https://doi.org/10.1002/mar.21103>
- Festinger, L. (1954) A theory of social comparison processes. *Human Relations*, 7(2), 117–140.
<https://doi.org/10.1177/001872675400700202>
- Gentina, E., Shrum, L.J., & Lowrey, T.M. (2016). Teen attitudes toward luxury fashion brands from a social identity perspective: A cross-cultural study of French and U.S. teenagers. *Journal of Business Research*, 69(12), 5785–5792. <https://doi.org/10.1016/j.jbusres.2016.04.175>
- Gil, L.A., Kwon, K.-N., Good, L.K., & Johnson, L.W. (2012). Impact of self on attitudes toward luxury brands among teens. *Journal of Business Research*, 65(10), 1425–1433.
- Jin, S.-A. A. (2012). The potential of social media for luxury brand management. *Marketing Intelligence & Planning*, 30(7), 687–699. <https://doi.org/10.1108/02634501211273805>
- Kaakinen, M., Sirola, A., Savolainen, I., & Oksanen, A. (2020). Impulsivity, internalizing symptoms, and online group behavior as determinants of online hate. *PLOS One*, 15(4), e0231052.
- Karlsson, N., Gärling, T., Dellgran, P., & Klingander, B. (2005). Social comparison and consumer behavior: When feeling richer or poorer than others is more important than being so. *Journal of Applied Social Psychology*, 35(6), 1206–1222. <https://doi.org/10.1111/j.1559-1816.2005.tb02167.x>
- Kasser, T., & Ryan, R.M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, 22(3), 280–287.
- Kastanakis, M.N., & Balabanis, G. (2012). Between the mass and the class: Antecedents of the “bandwagon” luxury consumption behavior. *Journal of Business Research*, 65(10), 1399–1407.
- Leban, M., Seo, Y., & Voyer, B.G. (2020). Transformational effects of social media lurking practices on luxury consumption. *Journal of Business Research*, 116, 514–521.
- Muntinga, D.G., Moorman, M., & Smit, E.G. (2011). Introducing COBRAs: Exploring motivations for brand-related social media use. *International Journal of Advertising*, 30(1), 13–46.
- Neave, L., Tzemou, E., & Fastoso, F. (2020). Seeking attention versus seeking approval: How conspicuous consumption differs between grandiose and vulnerable narcissists. *Psychology and Marketing*, 37(3), 418–427. <https://doi.org/10.1002/mar.21308>
- Nelissen, R.M.A., & Meijers, M.H.C. (2011). The social benefits of luxury brands are costly signals of wealth and status. *Evolution and Human Behavior*, 32(5), 343–355.
- Park, S.Y., & Baek, Y.M. (2018). Two faces of social comparison on Facebook: The interplay between social comparison orientation, emotions, and psychological well-being. *Computers in Human Behavior*, 79, 83–93. <https://doi.org/10.1016/j.chb.2017.10.028>

- Pilch, I., & Górnik-Durose, M.E. (2017). Grandiose and vulnerable narcissism, materialism, money attitudes, and consumption preferences. *The Journal of Psychology*, 151(2), 185–206.
- Pillai, K.G., & Nair, S.R. (2021). The effect of social comparison orientation on luxury purchase intentions. *Journal of Business Research*, 134, 89–100. <https://doi.org/10.1016/j.jbusres.2021.05.033>
- Sedikides, C., Gregg, A.P., Cisek, S., & Hart, C.M. (2007). The I That Buys: Narcissists as Consumers. *Journal of Consumer Psychology*, 17(4), 254–257. [https://doi.org/10.1016/S1057-7408\(07\)70035-9](https://doi.org/10.1016/S1057-7408(07)70035-9)
- Stathopoulou, A., & Balabanis, G. (2019). The effect of cultural value orientation on consumers' perceptions of luxury value and proclivity for luxury consumption. *Journal of Business Research*, 102, 298–312.
- Stiglbauer, B., & Kovacs, C. (2019). Need for uniqueness determines reactions to web-based personalized advertising. *Psychological Reports*, 122(1), 246–267. <https://doi.org/10.1177/0033294118756353>
- Sun, G., Wang, W., Cheng, Z., Li, J., & Chen, J. (2017). The intermediate linkage between materialism and luxury consumption: Evidence from the emerging market of China. *Social Indicators Research*, 132(1), 475–487. <https://doi.org/10.1007/s11205-016-1273-x>
- Tian, K.T., Bearden, W.O., & Hunter, G.L. (2001). Consumers' need for uniqueness: Scale development and validation. *Journal of Consumer Research*, 28(1), 50–66. <https://doi.org/10.1086/321947>
- Vigneron, F., & Johnson, L.W. (1999). Review and a conceptual framework of prestige-seeking consumer behaviour. *Academy of Marketing Science Review*, 99(1), 1–15.
- Vivek, S.D., Beatty, S.E., & Morgan, R.M. (2012). Customer engagement: Exploring customer relationships beyond purchase. *Journal of Marketing Theory and Practice*, 20(2), 122–146.
- Wong, N. Y., & Ahuvia, A. C. (1998). Personal taste and family face: Luxury consumption in Confucian and Western societies. *Psychology & Marketing*, 15(5), 423–441.
- Yoo, J., Choi, S., Choi, M., & Rho, J. (2014). Why people use Twitter: Social conformity and social value perspectives. *Online Information Review*, 38(2), 265–283. <https://doi.org/10.1108/OIR-11-2012-0210>

SESSION 41.3: METHODS THAT MATTER: TEACHING RESEARCH INTO ACTION

Moderators:

Mohammadali Koorank Beheshti

Full Papers

Sensory Appeal and Influencer Strategy: A Framework for Customer-Based Brand Equity

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This study investigates the combined influence of sensory marketing and influencer strategies on customer-based brand equity (CBBE) in Ghana's beverage sector, with brand experience as a mediator and influencer credibility as a moderator. Addressing gaps in prior research, it develops and tests an integrated framework linking sensory appeal, influencer-driven storytelling, and brand equity formation.

A cross-sectional survey of 409 consumers in Accra and Kumasi, focusing on six leading beverage brands, was analyzed using structural equation modeling. All constructs met established reliability and validity thresholds, and model fit indices confirmed a strong fit. Results show that all six hypotheses were supported.

Moderation analysis reveals that influencer credibility strengthens the impact of influencer strategy on brand experience and of brand experience on CBBE, with stronger effects for high-credibility influencers.

The findings extend experiential branding theory by integrating sensory and relational drivers of brand equity, and by identifying credibility as a key boundary condition. Managerially, they offer guidance for aligning sensory design and credible influencer partnerships to create immersive brand experiences that translate into stronger equity in competitive, digitally driven markets.

Introduction

In contemporary marketing, a critical challenge lies in effectively harnessing sensory marketing in conjunction with influencer strategies to cultivate robust customer-based brand equity (Farivar & Wang, 2022; Moreira, Fortes & Santiago, 2017; Hepola & Hintikka, 2017). The ability of a brand to forge lasting emotional connections through sensory experiences is a cornerstone of successful marketing (Tran et al., 2025). Sensory marketing, which strategically appeals to consumers' senses, has emerged as a potent tool for shaping perceptions and driving consumer behavior (Pandey & Tripathi, 2025). However, many brands fail to fully integrate sensory appeals into their broader marketing strategies, particularly when collaborating with influencers. This disconnect represents a missed opportunity, as influencers wield considerable power in shaping consumer preferences and brand perceptions, especially when their content resonates on a sensory level (Kaushik & Gokhale, 2022). The problem is magnified by the rapid evolution of digital marketing, where consumers are bombarded with information and have increasingly short attention spans. Brands that can create memorable, sensory-rich experiences are more likely to cut through the noise and establish a strong, positive brand image (Nyman, 2025; Hussain, 2018). Practically, the relevance of this issue stems from the increasing importance of brand equity as a driver of financial performance. Brands with strong customer-based brand equity enjoy greater customer loyalty, higher price premiums, and increased resilience to competitive threats. Therefore, understanding how to strategically align sensory marketing with influencer strategies is not just a theoretical exercise but a practical imperative for brands seeking to thrive in today's competitive landscape (Kim & Sullivan, 2019).

The current state of the art in sensory marketing highlights the potential of sensory imagery to craft immersive consumer experiences, especially within the food and beverage sector, showing how sensory appeals can positively influence consumer perception (Wiedmann et al., 2018). Emotional branding, which emphasizes forging profound emotional connections between consumers and brands, underscores the value of sensory experiences in building brand preference and loyalty (Zha et al., 2025). The impact of sensory brand experiences on brand equity, indicating that the quality of an experience amplifies when multiple senses are congruently engaged (Gao & Shen,

2024). Prior research has focused on the environmental or product itself, with less attention to packaging (Krishna et al., 2017). The literature acknowledges the importance of sensory cues in shaping consumer behavior and brand perceptions (Shahid et al., 2022). However, there are shortcomings in the existing literature. One significant gap is the limited understanding of how sensory marketing can be effectively integrated with influencer marketing strategies to maximize customer-based brand equity. While studies have examined the impact of sensory marketing on individual consumer responses, fewer studies have explored the synergistic effects of combining sensory appeals with the reach and persuasive power of influencers. Another key shortcoming is the lack of a comprehensive framework for guiding brands in selecting the right influencers and crafting sensory-rich content that aligns with their brand values and target audience. Furthermore, the literature often lacks detailed insights into the specific sensory cues (e.g., sounds, scents, textures) that resonate most effectively with different consumer segments in various product categories.

To address the gaps in the literature, this study asks the following key research questions: How does the strategic alignment of sensory marketing with influencer strategies impact customer-based brand equity? What specific sensory cues, when communicated through influencer-generated content, most effectively drive consumer engagement and brand loyalty? In what ways can brands optimize their influencer selection process to ensure that influencers possess the credibility and aesthetic sensibilities necessary to authentically convey sensory brand experiences? What are the moderating effects of influencer credibility on the relationship between sensory-focused influencer marketing strategy and brand experience? The indirect effect of influencer strategy on CBBE (via brand experience) is stronger when influencer credibility is high? This study aims to address the identified shortcomings by providing a comprehensive framework for integrating sensory marketing with influencer strategies. The framework aims to guide brands in creating authentic sensory-rich content. By answering these questions, this research contributes to a more nuanced understanding of how brands can leverage sensory marketing and influencer strategies to cultivate stronger, more meaningful relationships with their customers and ultimately enhance customer-based brand equity.

This study contributes to the existing body of knowledge by offering a comprehensive framework for aligning sensory marketing with influencer strategies to enhance customer-based brand equity. By elucidating the mechanisms through which sensory cues in influencer-generated content impact consumer perceptions and brand loyalty, this research provides actionable insights for brands seeking to optimize their marketing efforts. Furthermore, the study identifies the key sensory elements that are effective in building brand image and customer loyalty (Hussain, 2018). The study will also contribute to the responsible marketing and corporate social responsibility debate by highlighting influencer marketing's potential impact on sustainable consumer behavior (Vasita & Chouhan, 2024).

Theory, Literature Review and Hypothesis Development

1. Customer-Based Brand Equity (CBBE)

Customer-based brand equity (CBBE) has emerged as a cornerstone concept in branding theory, emphasizing the value derived from consumer perceptions, associations, and experiences with a brand. Rooted in Keller's (1993) seminal work, CBBE suggests that brand strength resides in the minds of consumers, shaped by awareness and perceived quality. Over the past decade, scholars have extended this framework to examine how evolving marketing practices particularly in digital and sensory domains influence brand equity outcomes. Recent studies highlight the increasing importance of experiential and emotional engagement in shaping brand-related attitudes, signaling a shift from traditional brand management toward more immersive and interactive strategies (Nayeem et al., 2019; Brakus et al., 2022). This conceptual evolution reflects broader changes in consumer behavior, particularly in digitally mediated environments where brands must compete for attention through novel and engaging formats.

The relevance of CBBE as a theoretical lens is heightened by the growing role of sensory appeal and influencer marketing in shaping brand experiences. Sensory appeal encompassing visual, auditory, and tactile stimuli has been shown to enhance brand recall and emotional connection, which are central to building strong brand equity (Samson et al., 2021). Simultaneously, influencer strategies have become a dominant force in brand communication, especially among younger audiences who trust peer-like endorsers over traditional advertising (Djafarova & Matson, 2021). Despite their widespread adoption, the mechanisms through which these two elements interact to influence CBBE remain underexplored. Theoretical integration of sensory and social media-driven

marketing tactics into the CBBE model is still nascent, leaving gaps in understanding how these components synergistically affect brand strength.

Current literature provides some insights into the individual effects of sensory marketing and influencer endorsements on brand outcomes. For instance, sensory cues such as color, sound, and scent have been found to evoke emotional responses that reinforce brand identity and differentiation (Helmefalk & Hultén, 2017). Similarly, influencers are recognized for their ability to humanize brands and foster parasocial relationships that enhance credibility and loyalty (Ahmed et al., 2024). However, few studies have examined how the combination of sensory-rich content and influencer narratives collectively shape brand equity. Most existing research treats these factors in isolation or within narrow industry contexts, limiting generalizability across markets and consumer segments. Moreover, there is limited empirical evidence linking specific sensory modalities or influencer characteristics such as authenticity or niche expertise to measurable dimensions of CBBE.

This gap represents a critical shortcoming in both academic inquiry and managerial practice. From a theoretical standpoint, integrating sensory appeal and influencer strategy into a unified CBBE framework could refine our understanding of how contemporary brand experiences are constructed and internalized. Practically, marketers need clearer guidance on optimizing multi-sensory content and selecting influencers who align not only with brand values but also with the cognitive and affective processes that drive brand equity. Without such a framework, brands risk deploying disjointed campaigns that fail to resonate cohesively with consumers. Therefore, developing a comprehensive model that articulates how sensory and social elements interact to build customer-based brand equity is both timely and necessary, offering valuable contributions to both branding theory and strategic marketing practice.

2. Sensory Marketing

Sensory marketing has gained increasing attention over the past decade as brands seek to create deeper emotional and cognitive connections with consumers through multi-sensory experiences. Grounded in psychological theories of perception and memory, sensory marketing leverages visual, auditory, olfactory, tactile, and gustatory stimuli to influence consumer behavior and brand evaluation (Krishna, 2012; Helmefalk & Hultén, 2017). Recent research underscores how sensory cues can enhance brand recognition, evoke emotional responses, and reinforce brand identity across both physical and digital environments (Moreira et al., 2017; Krishna et al., 2016). This growing body of work suggests that sensory elements are not merely aesthetic enhancements but integral components of brand strategy that shape consumer-brand relationships.

Despite its conceptual promise, integrating sensory marketing into broader branding frameworks particularly customer-based brand equity (CBBE) remains a challenge. While Keller's (1993) CBBE model highlights the importance of brand knowledge and associations, it does not fully account for how sensory inputs contribute to the formation and reinforcement of those associations. The problem lies in the evolving nature of consumer engagement: today's consumers interact with brands through immersive, digitally mediated experiences where sensory appeal plays a central role in capturing attention and fostering emotional resonance. From a theoretical perspective, there is a need to expand traditional models of brand equity to include sensory dimensions that reflect contemporary consumption contexts. Practically, marketers require a clearer understanding of how specific sensory strategies can be deployed to strengthen brand equity across diverse platforms and touchpoints. As a result, sensory marketing is underpinned by Stimulus-Organism-Response (S-O-R) model, originally proposed by Mehrabian and Russell (1974). As a framework, has become a widely adopted framework in sensory marketing research due to its ability to explain how external stimuli influence internal affective and cognitive states, ultimately shaping consumer behavior. In this model, environmental stimuli (S) elicit psychological responses (O—organismic states such as emotions, arousal, or cognitive processing), which then lead to behavioral outcomes (R). In the context of sensory marketing, sensory cues—such as color, scent, sound, and texture—are conceptualized as external stimuli that activate emotional and cognitive reactions, influencing brand-related behaviors like purchase intent, brand recall, or perceived quality (Baker et al., 2021). The S-O-R model thus provides a structured pathway for understanding how multisensory experiences shape consumer-brand interactions.

Recent applications of the S-O-R model in marketing have demonstrated its utility in explaining consumer responses to immersive brand environments, digital interfaces, and advertising formats (Erensoy et al., 2024). For example, studies have shown that visual and auditory elements in online advertisements can trigger positive affective states, which in turn enhance brand engagement and trust (Loureiro et al., 2020). The above findings

underscore the relevance of the model in capturing the experiential dimension of branding, particularly in contexts where sensory appeal plays a central role in differentiating brands and fostering emotional attachment.

Influencer Marketing

Influencer marketing has rapidly evolved from a niche digital tactic to a central component of modern brand strategy. Rooted in social learning theory and parasocial interaction frameworks, influencer marketing leverages the credibility and reach of individuals who have cultivated engaged online followings (Hudders et al., 2021; Lou & Jin, 2024). According to social learning theory, individuals learn not only from direct experience but also by observing others—particularly those they perceive as credible, similar, or authoritative. In the context of influencer marketing, influencers serve as models whose behaviors, preferences, and lifestyle choices are emulated by followers. This is especially evident in product endorsements, where consumers observe influencers using and endorsing brands, which can lead to attitude formation and behavioral intent without direct personal experience with the product. Recent studies have reaffirmed the relevance of social learning mechanisms in digital environments, particularly on platforms like Instagram and TikTok, where visual and narrative content fosters vicarious experiences that influence brand perceptions (Lou & Jin, 2024). Complementing social learning theory, parasocial interaction (PSI) offers insight into the emotional bonds that develop between consumers and influencers over time. PSI refers to the one-sided, quasi-interpersonal relationships formed through repeated media exposure, where audiences feel a sense of familiarity, intimacy, and connection with media personalities (Hartmann, 2023). In influencer marketing, these perceived relationships enhance trust and loyalty, making followers more receptive to brand messages conveyed by influencers (Kim & Kim, 2021; Okonkwo & Namkoisse, 2023). Unlike traditional celebrities, influencers often cultivate a more approachable and relatable persona, fostering stronger parasocial ties that amplify their persuasive power. Research has shown that the strength of these interactions significantly affects consumer engagement and brand recall, underscoring the psychological depth of influencer-consumer relationships (Djafarova & Matson, 2021). Together, social learning theory and parasocial interaction provide a dual lens through which to examine the psychological mechanisms driving influencer marketing effectiveness. While social learning explains how consumers acquire brand-related knowledge and attitudes through observation, PSI elucidates the emotional underpinnings that make influencers more persuasive than conventional advertising sources. However, despite their theoretical utility, empirical integration of these frameworks in influencer marketing research remains fragmented. Much of the existing literature focuses on short-term campaign outcomes such as engagement metrics or purchase intent rather than exploring how influencer partnerships shape deeper psychological constructs like brand awareness, loyalty, or perceived quality (Valmohammadi et al., 2025; Almoraiash, 2024). Additionally, while researchers have begun to examine the role of influencer attributes such as credibility, attractiveness, and expertise in moderating campaign effectiveness (Kareem & Venugopal, 2023; Schouten et al., 2021), less attention has been paid to how these elements interact with the sensory characteristics of the content they deliver. This disconnect limits our understanding of how influencer strategies can be systematically aligned with brand-building objectives.

The current state of the art reflects increasing interest in integrating influencer marketing into strategic brand management. Recent studies emphasize the importance of congruence between the influencer's persona and the brand image in fostering positive consumer responses (van Reijmersdal et al., 2024; Drew et al., 2022). Furthermore, there is growing recognition that platform-specific affordances such as Instagram's visual focus or TikTok's immersive video format mediate the impact of influencer content on audience engagement (Drew et al., 2022). However, most research continues to treat influencer marketing as a tactical rather than strategic tool, missing opportunities to connect it more explicitly with core branding theories like CBBE. While some scholars have called for more holistic integration (Gurrieri et al., 2024; Jayasinghe, 2021; Cartwright et al., 2022), empirical models linking influencer-driven communication to brand equity dimensions remain sparse.

From the foregoing, a holistic framework integrating sensory appeal and influencer strategy within the CBBE model suggests that sensory elements enhance brand experience and memory structures, directly influencing customer based brand equity dimensions. Also, influencer strategies mediate brand attitude through credibility and parasocial interaction, boosting customer based brand equity dimensions. Finally, these strategies create a multi-dimensional brand experience, strengthening all components of CBBE. This integration aligns with recent calls for experiential and sensory-driven branding models (Brakus et al., 2009), particularly relevant in service-intensive sector.

Literature and Hypothesis Development

Sensory Appeal and Brand Experience

Traditional marketing often emphasizes functional product benefits, while experiential marketing aims to engage consumers more deeply through emotional and sensory engagement (Wiedmann et al., 2018). This approach, often referred to as sensory marketing, involves using one or more of the five senses sight, sound, touch, smell, and taste—to shape consumer perceptions, judgments, and behaviors (Krishna, 2012; Xixiang et al., 2016). Sensory marketing seeks to create richer, more memorable brand experiences that foster stronger emotional and cognitive associations between the brand and the consumer (Pelletier & Collier, 2018).

The application of sensory strategies is particularly relevant in experience-intensive sectors such as hospitality, retail, and FMCG. Research has explored sensory branding in airline experiences (Kim et al., 2016), fast-moving consumer goods advertising (Valipouri et al., 2022), and store atmospherics (Pal & Srivastava, 2024; Helme Falk, 2019), emphasizing the practical value of sensory cues in enhancing consumer engagement. Sensory marketing is thus positioned as a strategic approach for building brand value by influencing customer perceptions and behavior (Hultén, 2011).

From a theoretical standpoint, sensory appeal relates closely to the customer experience literature. In increasingly competitive markets, brands must differentiate through touchpoints that go beyond functionality, especially as product offerings become more similar (Brakus et al., 2009; Lemon & Verhoef, 2016). Sensory modalities differ in how they influence experience. For example, touch is considered the most enduring sense, developing early in life and persisting the longest (Krishna, 2012). Other senses follow distinct developmental and perceptual trajectories, each contributing differently to consumer experience depending on context and proximity (Biswas, 2019).

Interestingly, sensory effects can also emerge without direct contact through mental imagery, where consumers recall stored sensory inputs that evoke emotional and behavioral responses similar to real-time stimuli (Elder & Krishna, 2012; Aydinoglu & Krishna, 2019). This has implications for branding, especially in digital contexts where multisensory engagement is often simulated rather than physical.

Empirical studies demonstrate that sensory cues can influence various consumer outcomes. Positive sensory elements such as appealing visuals, ambient sound, and pleasant scents have been shown to impact store preference (Soars, 2009), induce emotional states like relaxation (Serrano et al., 2016), and enhance destination branding (Kah et al., 2023). A consistent and balanced application of sensory inputs contributes to a more integrated and memorable brand experience (Hultén, 2011). Overloading any one sense, however, can dilute the experience, underscoring the need for thoughtful sensory design (Wiedmann et al., 2018).

Physical environments, particularly in-store settings, provide a prime opportunity for engaging multiple senses simultaneously (Kumagai & Nagasawa, 2021). When well-managed, these experiences translate into stronger brand associations, emotional resonance, and customer recall (Krishna, 2012). Despite growing interest, there remains limited empirical research linking sensory appeal to long-term brand equity outcomes such as loyalty and advocacy. Most studies isolate individual sensory effects, leaving a gap in understanding how holistic sensory strategies contribute to the broader brand experience.

Drawing on the Stimulus-Organism-Response (S-O-R) model, which explains how external stimuli affect internal states and result in behavioral responses, this study proposes that sensory cues significantly shape customers' experiential engagement with brands, particularly in hospitality settings. Based on this reasoning, we hypothesize:

H1: Sensory appeal have a positive impact on brand experience.

Sensory Appeal and Brand Equity

A growing body of research has established that sensory stimuli play a significant role in shaping consumer behavior and brand perceptions (Hultén, 2011; Rodrigues et al., 2011; Costa et al., 2012; Krishna, 2012). Sensory marketing refers to the strategic use of sensory cues to communicate a brand's value, create distinctive experiences, and encourage both repeated engagement and word-of-mouth sharing (Costa et al., 2012). When sensory stimuli are consistent with the broader brand identity, they enhance brand perceptions and contribute positively to consumer evaluations (Moreira et al., 2017).

The connection between sensory input, memory, and emotion is central to this effect. Krishna (2012) notes that sensory experiences are tied closely to emotional responses and memory, which in turn shape behavioral outcomes. Hultén (2011) argues that sensory-driven experiences help establish brand image by reinforcing positive affective states. Further, the combination of sensory variety and cognitive consistency can deepen associations with a brand, allowing consumers to relive those experiences and reinforcing brand meaning over time (Moreira et al., 2017).

Through the five senses sight, sound, touch, taste, and smell brands can activate specific memories and build awareness and associations that are emotionally resonant and personally meaningful (Khanna & Mishra, 2012). However, findings about the relationship between sensory stimuli and all components of brand equity are not entirely uniform. While Costa et al. (2012) found that sensory experiences could support brand loyalty, Khanna and Mishra (2012) did not observe a strong link between sensory cues and loyalty behaviors. This suggests that while sensory marketing may shape perception and associations effectively, its impact on behavioral loyalty may depend on other mediating factors such as customer satisfaction or perceived value.

A multisensory strategy can also evoke subconscious reactions that shape how consumers evaluate product attributes and brand personality. These reactions may influence perceptions of quality, innovation, or elegance, contributing to the development of a distinct brand image (Rajput & Dhillon, 2013). Sensory marketing thus becomes a way of differentiating service experiences by using subtle cues colors, textures, scents, or sounds to guide consumer interpretation and memory.

In sum, sensory marketing contributes to brand equity by enhancing brand awareness, strengthening associations, and building emotional connections with consumers. Based on these insights, the following hypothesis is proposed:

H2: Sensory appeal have a positive impact on brand equity.

Brand Experience and Brand Equity

The relationship between brand experience and brand equity has received growing scholarly attention, with several studies affirming that brand experience plays a critical role in shaping brand equity outcomes. Shamim and Butt (2013) found both direct and indirect effects of brand experience on brand equity, with results indicating that experiences significantly enhance consumers' overall evaluation of the brand. Similarly, Esch et al. (2012) demonstrated that brand experience strongly influences brand equity and impacts key components such as brand awareness and cognitive associations.

Brakus et al. (2009) proposed that brand experience influences brand loyalty and customer satisfaction directly, while brand personality associations are affected more indirectly. Sensory aspects of experience have also been shown to positively affect brand equity (Sheng & Teo, 2012), reinforcing the argument that multisensory brand interactions create lasting consumer impressions.

In the B2B context, Biedenbach and Marell (2010) showed that customer experience positively contributes to brand equity, particularly by strengthening brand associations more than brand awareness. Zarantonello and Schmitt (2013), focusing on event marketing, also found that brand experience enhances brand equity through meaningful, affective engagement.

Studies in specific brand settings further support this link. For instance, research on Starbucks indicated that sensory brand experience has a significant positive effect on brand equity (Cleff, Lin, & Walter, 2014). Berry and Seltman (2007) emphasized the essential role of well-crafted brand experiences in building enduring brand equity.

Hultén, Broweus, and Van Dijk (2009) highlighted that a rich combination of sensory stimuli can raise customer service standards and improve long-term brand recognition and image. Sensory-driven marketing contributes to brand uniqueness, encourages memorability, and increases the likelihood of positive word-of-mouth (Costa et al., 2012). Moreover, brand associations are enhanced when sensory experiences are both diverse and cognitively coherent, allowing for the retrieval and reliving of those experiences from memory (Chang & Chieng, 2006).

In service environments such as catering, Moreira, Fortes, and Santiago (2017) found that sensory brand experiences significantly enhance brand equity. Emotional and sensory dimensions were also shown to be more influential in customer decision-making than tangible product attributes (Zaltman, 2003). Rajput & Dhillon (2013) further emphasized that affective and sensory elements influence consumer judgments, strengthen brand reputation, and contribute to long-term memory formation.

Despite these insights, Khan and Rahman (2015) note that empirical work explicitly connecting brand experience and brand equity remains relatively limited, particularly across varied contexts and industries. This gap signals the need for further investigation into the strength and pathways of this relationship.

Based on this review, we propose the following hypothesis:

H3: Brand experience has a positive impact on brand equity.

Influencer Strategy and Brand Equity

The rise of influencer marketing is closely tied to the broader shift toward co-creation and participatory branding. Influencers are typically ordinary individuals who, through consistent content creation and audience engagement, build a public image that holds value for both themselves and the brands they represent. Unlike traditional celebrities, social media influencers often develop credibility through perceived authenticity, relatability, and regular interaction with followers. Their endorsement of a brand can help transfer meaning and build trust, making them important intermediaries in the branding process (McCracken, 1989; Khamis et al., 2017).

Influencers often create user-generated content (UGC) that merges personal identity with brand messaging. This form of content tends to be persuasive because it is seen as less scripted and more honest than traditional advertising (Berthon et al., 2008). In this context, brands benefit from influencers' desire to be seen as tastemakers or cultural intermediaries. Influencers, in turn, gain visibility and social capital—what some refer to as “insta-fame” (Hearn & Schoenhoff, 2015). This dynamic makes influencer strategy particularly effective for brands aiming to enhance brand awareness, image, and engagement.

Social media influencers can shape brand equity by increasing emotional attachment and consumer involvement. Research shows that consumer engagement through social platforms contributes positively to word-of-mouth (WoM) activity, brand awareness, and purchase intention (Hutter et al., 2013; Prahalad & Ramaswamy, 2002). However, the literature also cautions against overestimating this effect. For example, Bruhn et al. (2012) found that UGC did not significantly influence perceived brand credibility or trustworthiness in all contexts, suggesting that the impact of influencer content may depend on the brand category or the nature of the product being promoted.

Further, influencer strategy is closely tied to identity construction. Influencers carefully curate content that aligns not only with brand values but also with their own personal narratives. Posting branded content becomes part of how they construct a desirable public image (Khamis et al., 2017). This self-branding practice often drives influencers to be selective about the brands they work with, choosing those that enhance their personal relevance and aesthetic. When audiences engage with such content, they are not just absorbing product information they are responding to the social and cultural cues embedded in the influencer's identity.

The interactive nature of this relationship makes it increasingly difficult to separate brand equity from the people who promote the brand. Influencer strategy, therefore, can play a pivotal role in shaping consumer-based brand equity (CBBE) by influencing how consumers think, feel, and act toward a brand.

Based on this literature, the following hypothesis is proposed:

H4: Influencer strategy has a positive impact on customer-based brand equity.

Influencer Strategy and Brand Experience

Social media influencers are increasingly seen as key intermediaries in shaping how consumers experience brands in the digital space. Unlike traditional advertising, influencer content is typically consumed in more personal and immersive contexts, where users follow influencers not only for product recommendations but also for the

pleasure, enjoyment, and social recognition associated with following someone relatable or aspirational. Audiences often appreciate influencers for their expertise in specific domains, as well as for the polished and emotionally resonant content they share. This recognition contributes to a more favorable attitude toward both the influencer and the brands they endorse (Jin & Phua, 2014).

A key value that influencers offer in the branding process lies in their ability to provide virtual product experiences. By sharing opinions, demonstrations, and day-in-the-life narratives, influencers offer audiences an indirect yet vivid sense of what using a product or service might feel like. This aligns with the idea of pre-consumption experience, where consumers engage with the brand before purchase through interactive or observational media. Such mediated exposure can influence brand evaluation by simulating sensory and emotional touchpoints typically available in physical brand encounters.

The concept of immersion is central to understanding how influencer content shapes brand experience. Immersion refers to a psychological state where individuals are fully engaged and absorbed in a particular activity or narrative. In social media environments, this often takes the form of deep engagement with a content creator's storytelling, visual presentation, and personal commentary. Research on flow theory (Csikszentmihalyi, 1990) supports the idea that when people are fully immersed in enjoyable and meaningful digital interactions, they are more likely to experience positive emotions, form stronger memories, and develop a lasting connection with the content and the brand it represents.

Influencer content often emphasizes intimate, authentic, and niche-focused communication, which facilitates this immersive experience. Rather than presenting polished corporate messages, influencers use storytelling and emotional appeal to draw followers into a brand narrative. When audiences are psychologically immersed in this content focused on the storyline, tone, and visual cues, they are more likely to feel emotionally connected to the brand. This immersive state contributes to more favorable brand evaluations and strengthens the experiential aspect of branding in digital spaces.

Based on this literature, the following hypothesis is proposed:

H5: Immersion in influencer-generated content has a positive impact on brand experience.

Mediating Role of Brand Experience

A growing body of research underscores the pivotal role of brand experience in shaping customer-based brand equity (CBBE), particularly in contexts where sensory appeal is a core component of brand strategy. Brand experience, defined as the sensory, affective, behavioral, and cognitive responses evoked by brand-related stimuli (Brakus et al., 2009), serves as a key mechanism through which consumers form lasting brand associations. Sensory appeal encompassing visual, auditory, olfactory, and tactile elements has been shown to heighten emotional engagement and immersion, thereby enriching brand experiences (Helmefalk & Hultén, 2017). These enriched experiences, in turn, contribute to stronger brand recall, perceived quality, and loyalty, which are central dimensions of CBBE. Recent empirical studies have reinforced this pathway, demonstrating that multisensory brand interactions enhance experiential value, which subsequently elevates brand equity outcomes (Hepola et al., 2017; Moreira et al., 2017).

The mediating function of brand experience aligns with theoretical perspectives from both sensory marketing and branding literature. Drawing on the Stimulus-Organism-Response (S-O-R) model, sensory cues act as external stimuli that evoke internal affective and cognitive states manifested here as brand experience which then drive behavioral responses such as brand preference or advocacy (Liu et al., 2020). In this context, sensory appeal serves as the initial stimulus that triggers positive emotional and cognitive reactions, while brand experience consolidates these reactions into meaningful brand-related memories and evaluations. For instance, Ashley and Tuten (2015) found that visually compelling brand content increased consumer engagement and emotional connection, which were significant predictors of brand resonance (Hollebeek & Macky, 2019). This suggests that brand experience functions not merely as an outcome but as a conduit through which sensory strategies translate into long-term brand value.

Despite accumulating evidence supporting the sensory appeal–brand experience–CBBE link, there remains a need for more systematic examination of this mediating process across diverse brand contexts and consumer

segments. While several studies have confirmed the importance of experiential elements in luxury and retail settings (Shahid et al.2022; Schweiger et al., 2020), fewer have explored their applicability in digital environments or service-based brands.

Based on this literature, the following hypothesis is proposed:

H6: Brand experience mediates the relationship between sensory appeal and CBBE.

Moderating role of Influencer credibility

The role of influencer strategy in shaping brand experience has gained considerable attention, particularly as brands increasingly rely on digital personalities to convey their narratives in authentic and engaging ways. Influencers serve as both content creators and brand ambassadors, capable of evoking emotional and sensory responses that enhance how consumers interact with and perceive a brand (Misra et al.,2024). This is especially relevant in experiential branding, where the quality of consumer engagement often determines the depth and memorability of brand interactions. Research indicates that influencer-generated content can significantly enrich brand experiences by making them more relatable, immersive, and emotionally resonant (Djafarova & Matson, 2021). However, the extent to which these strategies yield positive experiential outcomes appears to depend on the perceived credibility of the influencer.

Influencer credibility typically defined as the perceived expertise, trustworthiness, and attractiveness of the influencer acts as a critical boundary condition that influences how audiences interpret and internalize brand-related messages (Erdogan, 1999; Qiu et al., 2023). When influencers are seen as knowledgeable and genuine, their endorsements are more likely to be viewed as credible, thereby amplifying the emotional and cognitive impact of the brand experience they co-create. For example, studies have shown that followers exposed to high-credibility influencers report stronger feelings of connection and engagement with the brand, leading to more favorable brand evaluations (Mehmood et al., 2025; Geng & Wang, 2024; Hudders et al., 2021). In contrast, when credibility is low, even well-crafted influencer content may fail to generate meaningful experiential value, or worse, trigger skepticism and disengagement.

Despite this emerging understanding, empirical investigations into the moderating role of influencer credibility in shaping brand experience remain limited in scope. Much of the existing research focuses on short-term engagement metrics rather than deeper experiential constructs such as emotional immersion or behavioral loyalty (Han & Chen, 2022; Tran et al., 2024). Additionally, while some studies have examined credibility as a composite construct, fewer have explored how its individual dimensions expertise versus trustworthiness, for instance, differentially influence various aspects of brand experience. Addressing these nuances will be essential for developing a more refined theoretical model that captures how and under what conditions influencer strategies effectively enhance brand experiences. Based on this literature, the following hypothesis is proposed:

H7: The effect of influencer strategy on brand experience is moderated by influencer credibility

Emerging research in influencer marketing suggests that the impact of influencer strategies on customer-based brand equity (CBBE) is not direct, but rather unfolds through intermediate psychological and experiential processes. One such process is brand experience, which has been increasingly recognized as a key driver of brand equity in experiential and digitally mediated consumption contexts (Brakus et al., 2022). Influencers, by virtue of their storytelling ability and relational capital with followers, can shape how consumers perceive and interact with a brand, thereby enhancing the richness and emotional depth of brand experiences. These enriched experiences, in turn, contribute to stronger brand associations, higher perceived quality, and greater loyalty core components of CBBE (Keller & Swaminathan, 2019). However, the strength of this indirect pathway is not uniform across all influencer-brand-consumer interactions.

A growing body of literature suggests that influencer credibility plays a pivotal moderating role in determining the effectiveness of influencer-driven brand strategies. Influencer credibility, typically conceptualized as a combination of expertise, trustworthiness, and attractiveness (Erdogan, 1999), influences how audiences receive and internalize brand-related content. When influencers are perceived as credible, their endorsements are more likely to be accepted as genuine and informative, fostering deeper emotional engagement and identification with the brand (Qiu et al., 2023). This heightened engagement amplifies the experiential value of the brand, reinforcing positive

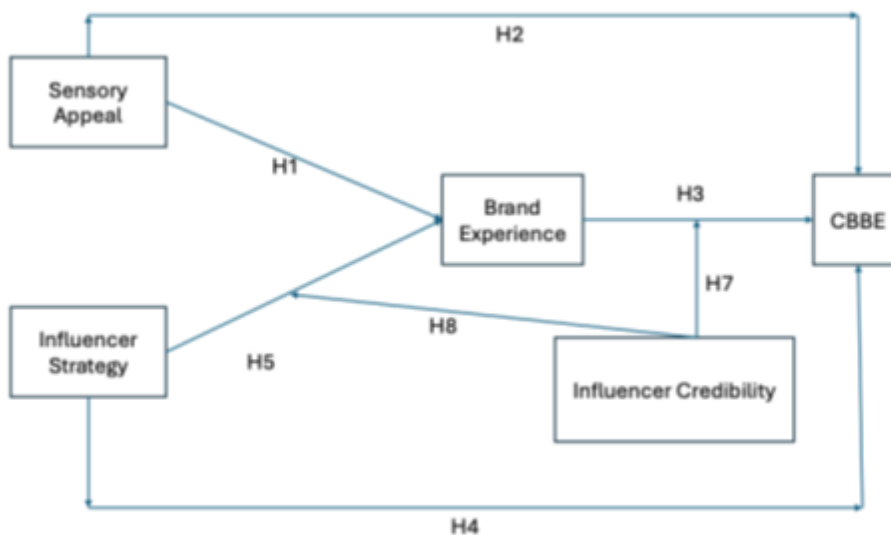
cognitive and affective associations. As a result, the indirect effect of influencer strategy on CBBE via brand experience should be stronger when influencer credibility is high, as the persuasive power of the influencer enhances both the immediacy and lasting impression of the brand experience.

Despite theoretical support for this moderated mediation mechanism, empirical validation remains limited, particularly regarding how credibility influences long-term brand equity outcomes through experiential pathways. Most studies have focused on immediate behavioral responses, such as click-through rates or purchase intent, without examining how these translate into sustained brand equity (Haans et al., 2013). Additionally, few studies differentiate between dimensions of credibility such as whether expertise or trustworthiness is more influential in shaping brand experiences and subsequent equity. Without unpacking these dynamics, marketers risk overgeneralizing the role of credibility in influencer marketing strategies. Based on this literature, the following hypothesis is proposed:

H8: The indirect effect of influencer strategy on CBBE (via brand experience) is stronger when influencer credibility is high

To sum up, we propose a conceptual model explaining the factors behind the comprehensive framework for integrating sensory marketing with influencer strategies to build customer based brand equity, as shown in Figure 1.

Figure 1. Author Created Framework



Methodology

We surveyed 453 respondents between April and May 2025. After checking for incomplete or invalid entries, 409 responses were used in the final analysis. Participants were based in Accra and Kumasi and were regular patrons of beverage brands. The survey focused on six major players in Ghana's beverage market: Coca-Cola Bottling Company of Ghana, Accra Breweries, Guinness Ghana Breweries, Kasapreko, Twellium, and GIHOC Distilleries. These brands were selected based on their visibility, market share, and consumer reach.

Participants answered three key questions. First, whether they had purchased from any of the six beverage brands recently. Second, if the purchase was made directly from the brand or through intermediaries like retailers or bars. If they confirmed purchase, we asked them to recall their experience with the product or service. Third, based on that experience, they responded to questions about the study's main variables.

Respondents were aged 22 to 45. The gender split was nearly even with 54.3% female, and 45.7% male. About 48.4% held undergraduate degrees, while 51.6% had postgraduate or higher qualifications. A little over half (57.2%) worked full-time in the corporate sector. Income levels were also diverse: 45% earned GHC 130,000 or less annually; 55% earned more. Most respondents were either in business (39%) or held senior corporate roles (37%). Intermediary channels were more popular, with over 75% of participants preferring them. Around 42% visited intermediaries monthly, and 34% did so five to six times every three months.

Measures

The study used previously validated scales. Sensory marketing cues came from Wiedmann et al. (2018). Brand equity was measured using items adapted from Yoo and Donthu (2001). Brand experience was measured using Brakus et al.'s (2009) scale. Influencer strategy was assessed using four criteria from Erkan and Evans (2016). Perceived influencer credibility followed Ohanian (1990), using six semantic differential items to assess trustworthiness and expertise.

We pretested the questionnaire on 40 MBA students to flag any confusing or unclear wording. We took steps to reduce method bias. First, we varied question order and wording. Second, we assured respondents that their answers would be anonymous and confidential. We collected no personal identifiers. Third, we had three academics and two professionals review the instrument for clarity and relevance. Their feedback shaped the final version. Last, we checked for common method variance statistically using the common latent factor approach (Podsakoff et al., 2003).

Results

This study checked for common method bias since we collected all data from the same participants. Harman's one-factor test showed that a single factor explained 24.37% of the variance well below the 50% cutoff. This suggests common method bias is not a concern. This study also used the common latent factor approach. The changes in regression weights were minor, all below 0.5, confirming no serious bias (Podsakoff et al., 2003). We also tested for common method variance using the CLF approach, comparing the regression weights of the constructs with and without the CLF included (Podsakoff et al., 2003). The differences were small, all under 0.5, which indicates there was no evidence of common method bias in the data (Gaskin, 2017). We ran SEM to test the model. Cronbach's alpha and composite reliability values were both above 0.70, confirming reliability. Convergent validity was met since all AVEs were over 0.50. Discriminant validity also held; each construct's AVE square root was higher than its correlations with other constructs as indicated in Table 1. CFA fit indices showed a strong model fit ($\chi^2/df = 1.125$, CFI = 0.98, NFI = 0.90, GFI = 0.91, TLI = 0.98, RMSEA = 0.01). The structural model also showed a good fit ($\chi^2 = 789.76$, $df = 690$, $\chi^2/df = 1.145$, CFI = 0.986, NFI = 0.903, GFI = 0.913, TLI = 0.987, RMSEA = 0.018). All six hypotheses were supported as reported in Table 2. Hypothesis 1 looked at how sensory marketing cues affect brand experience ($b = 0.27$; $t = 3.92$; $p < 0.05$). The findings show that these cues positively shape how consumers experience a brand, echoing earlier studies (Hulten, 2011; Schmitt, 199; Wiedmann et al., 2018). This underlines the importance of using sensory appeals to create brand experiences that feel engaging and memorable. Hypothesis 2 shows a clear positive link between sensory appeals and customer-based brand equity ($b = 0.57$; $t = 7.35$; $p < 0.05$). The findings suggest that sensory marketing plays a direct role in building consumers' knowledge and perceptions of beverage brands. Hypothesis 3 shows an important link between brand experience and brand equity ($b = 0.42$; $t = 5.68$; $p < 0.05$). This suggests that customer-based brand equity can grow over time when consumers have meaningful and engaging experiences with a brand (Brakus et al., 2009). Hypothesis 4 tested whether influencer strategy positively affects customer-based brand equity ($b = 0.62$; $t = 8.86$; $p < 0.05$). The results show that a strong influencer strategy helps customers form long-term connections with the brand, which in turn builds brand resonance. This finding supports our hypothesis.

Influencer strategy showed a strong effect on brand experience ($b = 0.60$; $t = 8.85$; $p < 0.05$).

SESSION 41.4: DESIGNING TRUST, BUILDING RESILIENCE

Moderators:

Shelly Rathee

Full Papers

Age stereotypes in advertising: Examining advertisement portrayals of older people

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Older people are still underrepresented in most forms of advertising, and when older people are included in advertisements the portrayals of them tend to be stereotyped. Additionally, both marketing researchers and practitioners have tended to focus their efforts on younger consumer groups. Lately, however, there have been several calls for research on how consumers respond to the representation of older consumers in advertising. In this paper, we thus examine how older consumers respond to stereotyped portrayals of older people in advertising, focusing on one of the aspects of age stereotypes that are most prevalent in advertising. More specifically, we examine age stereotypes in advertising relating to the portrayal of older people in advertisements as passive and physically weak, as opposed to active and physically strong. In two empirical studies designed as experiments, this paper compares the responses of older consumers (aged 60 years old or older) to advertising featuring stereotyped (passive) and non-stereotyped (active) portrayals of older people. Our results indicate positive responses to portraying older people as active and physically strong (as opposed to passive and physically weak) in advertisements. The advertisements featuring active portrayals of older people were perceived as less stereotyped than the advertisements featuring passive portrayals. Attitudes were also more positive for the advertisements that featured non-stereotyped, active portrayals of older people. These positive effects of challenging the “older people are more passive” age stereotype in advertising on advertisement attitudes are mediated by a social effect of advertising, namely social connectedness with the models featured in the ads. The empirical findings are discussed in relation to previous research, as well as in terms of their implications for advertising research and practice.

Keywords: Age stereotypes, Advertising stereotypes, Older consumers, Advertising, Representation

Introduction

Older consumers constitute a larger and more active consumer segment than ever before, and as life expectancies increase many older people continue to challenge stereotypes about the group by maintaining active lifestyles and continuing to adopt new brands and behaviors as they age (Taylor, 2022). Moreover, older consumers report more negative attitudes toward image, extravagance, sex, and greed appeals than younger consumers, and advertising that include an image or extravagance appeal produce less positive attitudes among Baby Boomers than among young consumers (Loro and Helgeson, 2013). Despite significant differences across generations in how individuals relate to advertising, older people are still underrepresented in most forms of contemporary advertising. Research based on content analysis studies have over the years consistently shown that advertisement portrayals of older people tend to be stereotyped (Eisend, 2022). In this paper, we thus examine these stereotyped portrayals of older people in advertising, focusing on some of the aspects of age stereotypes that are most prevalent in advertising (Thayer and Scufca, 2019). Based on a literature review and a series of empirical studies designed as experiments, the paper examines consumer responses to advertising featuring some of the most frequently occurring types of stereotyped portrayals of older people. More specifically, we examine advertising stereotypes relating to the portrayal of older people in advertisements as physically weak and passive. The purpose of this paper is thus to empirically examine the effects of age stereotypes in advertising. More specifically, we will examine consumer responses to portraying older people as active and physically strong (as opposed to passive and physically weak) in advertisements. The paper compares consumer responses to advertisements featuring 1) non-stereotyped portrayals of older people (older people portrayed as active and physically strong) and 2) stereotyped portrayals of older people (older people portrayed as passive and physically weak).

This paper contributes to advertising research by adding age stereotypes to the research literature on consumer responses to advertising stereotypes. Although age stereotypes are still prevalent in advertising (Eisend, 2022; Zhang et al. 2006), previous research has not explicitly examined any effects on consumer responses from the use of age stereotypes in advertising. As mentioned, positive ad effects have been demonstrated for non-stereotyped

ad portrayals which challenge other stereotypes, such as gender stereotypes (Eisend 2019; Liljedal, Berg, and Dahlen, 2020; Åkestam et al. 2021) and sexuality stereotypes (Åkestam, Rosengren, and Dahlen 2017b), but no previous advertising research has examined the effects of non-stereotyped age portrayals. As a theoretical explanation for the effects of using non-stereotyped age portrayals in ads, we examine the mediating role of the social effects of advertising. This paper thus adds to the corresponding literature by studying the social effects of advertising in the context of age stereotypes. The social effects of advertising are only included in around one percent of the studies in advertising research, and more research is still called for in this area (Eisend 2019; Kim et al. 2014).

Gaining more knowledge about consumer responses to advertising portrayals of older consumers should therefore be of interest to both marketing researchers and practitioners. Lately, there have also been several calls for research on how consumers respond to representation of older consumers in advertising (Taylor, 2022, Eisend, 2022), as research in this area is lacking. Stereotyped portrayals and the underrepresentation of groups of people in advertising are always important to consider, as these can have negative unintended consequences on the groups that are affected. Not only is the exposure to stereotypes harmful, but media underrepresentation can also in itself be harmful to the social groups affected by it. Conversely, previous research has only documented positive responses among younger consumer groups to representations of older people in advertising (Berg and Liljedal, 2023). The use of age stereotypes in advertising is problematic, as advertising stereotypes are known to have negative effects. Although there is a lack of research about the effects of age stereotypes in advertising, the negative effects of other ad stereotypes have been well documented (Dittmar and Howard 2004; Eisend, 2019; Martin and Gentry 1997). Negative effects from the activation of age stereotypes have also been documented (Groepel-Klein et al. 2017; Hess 2005), although these have not been specifically linked to age stereotypes in advertising. In addition to these negative effects of advertising stereotypes, several recent studies have been able to demonstrate positive ad and brand effects from avoiding their use by using non-stereotyped portrayals in advertising (Eisend 2019; Liljedal, Berg, and Dahlen 2020; Åkestam, Rosengren, and Dahlen 2017b, Åkestam et al. 2021). In this paper, we propose that these positive effects from the use of non-stereotyped portrayals in advertising will also extend to ads which break age stereotypes by featuring non-stereotyped age portrayals.

Older consumers

Age stereotypes in advertising

A stereotype can be defined as a set of generalized beliefs about the characteristics and attributes of a specific group (Bodenhausen and Richeson 2010). Age stereotypes are thus the ideas, judgements, and images that people have about aging and the elderly (Groepel-Klein et al. 2017). Although age stereotypes can be both negative and positive (Hummert et al. 1994), in this paper we limit our discussion of age stereotypes in advertising to include only negative age stereotypes. This is in line with the current discussion of gender stereotypes in advertising (Eisend 2019) which has also been limited to negative gender stereotypes. Stereotypes are still very commonly used in advertising and gender stereotypes, in particular, have attracted much research attention (Eisend 2010). Negative effects from the use of stereotypes in advertising have also been documented, mainly in terms of negative effects of self-comparison with stereotyped portrayals of highly attractive models in advertising (Richins 1991). Such negative effects of advertising stereotypes have notably been recorded for adolescent women, whose self-esteem is negatively affected by exposure to stereotyped ad portrayals (Martin and Gentry 1997; Eisend 2019), but studies have also demonstrated similar negative effects for older women (Dittmar and Howard 2004). Additionally, negative reactions to stereotyped advertising portrayals of women have been recorded in terms of negative affect in female consumers (Bower 2001). Not only is the exposure to stereotypes harmful, but media underrepresentation can also in itself be harmful to social groups (Baumann and de Laat 2012).

Although there is a lack of research about the effects of age stereotypes in advertising, the negative effects on older people of the activation of age stereotypes have been demonstrated with respect to memory performance (Hess 2005) as well as self-efficacy and cognitive performance (Groepel-Klein et al. 2017). Age stereotypes are not necessarily internalized by older people themselves, whose cognitive age is often ten to fifteen years lower than their biological age, meaning that they feel younger than they actually are (Greco 1988; Stephens 1991). Older people may therefore desire to avoid associating themselves with the negative stereotypes that are based on aging, as this poses an identity threat (Amatulli et al. 2018). Fear of self-devaluation and stigmatization can even lead older people to reject offers targeted specifically to older consumers, such as senior citizen discounts (Tepper 1994). Negative reactions to age stereotypes can also act as a stressor for older consumers, leading them to engage in the consumption of anti-aging products (Bae et al. 2018).

Most of the previous research about age stereotypes in advertising has been descriptive in that it has mainly focused on content analyses of ads, documenting the prevalence and portrayal of older people in advertising (Greco 1988; Zhang et al. 2006). These studies have documented an underrepresentation of older people in advertising and the frequent use of stereotyped portrayals of elderly consumers in television ads (Baumann and de Laat 2012; Greco 1993; Lewis, Medvedev, and Seponski 2011; Simcock and Sudbury 2006) and magazine ads (Lewis, Medvedev and Seponski 2011; Peterson 1992; Ursic, Ursic, and Ursic 1986). When older people feature in advertising, they are often portrayed in an undesirable light, for example, by portraying them as feeble, helpless, weak, lazy, or uninformed (Peterson and Ross 1997; Ursic, Ursic, and Ursic 1986). Older women are especially underrepresented in advertising. They not only appear even less frequently in ads than do older men (Simcock and Sudbury 2006; Ursic, Ursic, and Ursic 1986) but are also more often portrayed in a stereotyped way than are older men (Greco 1993; Swayne and Greco 1987). For example, older women may be depicted minding grandchildren and cooking, while older men are portrayed in managerial roles (Greco 1988). As age stereotypes in advertising are more pronounced for women, this paper will focus on non-stereotyped advertising portrayals of older women.

Although there is an awareness in the advertising industry of its use of stereotypes and that the use of stereotypes in advertising can be controversial, a naïve belief still persists in the industry that advertising stereotypes can be effective tools for quickly communicating ad messages (Windels 2016). Advertisers can also be hesitant to use older models in ads because they fear that it will alienate younger consumers (Szmigin and Carrigan 2000) or even older consumers who do not want to identify themselves as elderly (Greco 1988). As mentioned, when it comes to age stereotypes in advertising, some researchers even explicitly recommend that advertisers avoid the portrayal of older women in ads (Saad 2004; Greco 1988). These recommendations and the continued dominance of younger female models in advertising go against some recent advertising research on consumer responses to other advertising stereotypes which has not been able to document any positive ad effects from the use of stereotypes in advertising. In fact, this recent stream of research shows that avoiding the use of stereotypes by using non-stereotyped portrayals in advertising can have positive effects on how ads and brands are evaluated by consumers. Positive ad effects have previously been demonstrated for non-stereotyped ad portrayals of gender and sexuality. For example, Liljedal, Berg, and Dahlen (2020) demonstrated positive effects on ad attitudes and social effects of featuring non-stereotyped portrayals of occupational gender roles. Further, Åkestam, Rosengren, and Dahlen (2017b) also demonstrated positive ad effects and social effects for ads featuring non-stereotyped portrayals of sexuality.

In line with these findings, we predict that avoiding the portrayal of age stereotypes in advertising by the use of non-stereotyped age portrayals will have similar, positive effects on consumer responses to the ads. Thus, we predict that portrayals of older women in advertising (i.e., non-stereotyped age portrayals) for product categories associated with stereotyped age portrayals will have positive effects on attitudes for the ads in which they are featured as compared to ads featuring portrayals of younger women (i.e., stereotyped age portrayals).

H1 Advertisements featuring active portrayals of older people will be perceived as less stereotyped than advertisements featuring more passive portrayals of older people.

H2 Attitudes toward ads featuring active (non-stereotyped) portrayals of older people will be more positive than attitudes for ads featuring passive (stereotyped) portrayals of older people.

H3 Social connectedness will be higher for ads featuring active (non-stereotyped) portrayals of older people than for ads featuring passive (stereotyped) portrayals of older people.

H4 Social connectedness will mediate the positive effects of featuring active (non-stereotyped) portrayals of older people on ad attitudes (as hypothesized in H2).

Study 1

Study 1 was designed as a between-subjects experiment in order to test H1 and H2, using an online sample of older consumers from the UK and advertisements for an insurance company.

Stimuli

Two fictive advertisements for an anonymous insurance brand were created by the authors to be used as stimuli in Study 1. The advertisements featured pictures of older couples (one man and one woman), that were either depicted as passive or active. The pictures of the older couples were stock photos purchased from Shutterstock. (See appendix for the ads used in Study 1.) The advertisements were pre-tested to ensure that the active portrayal was perceived as more active and that the passive portrayal was perceived as more passive.

Participants and Procedure

Study 1 used an online convenience sample of 61 older consumers recruited from Prolific (34 women, 27 men, aged 60–74 years, mean age = 64.48). Prolific is an online research platform often used to recruit participants for academic research (Peer et al. 2017). Participants were each compensated with 1.5 GBP and randomly assigned to experimental groups, so that each participant viewed and answered questions about one of the ads. Attention check questions were used to ensure active participation.

Measurements

Attitudes towards the ads were measured using three items on a 7-point bipolar scale (bad[1]/good[7], dislike[1]/like[7], unpleasant[1]/pleasant[7], $\alpha = .929$). The degree to which the ads were perceived as stereotyped was assessed with the items “The ad is stereotyped” and “The ad shows a stereotyped image of older people,” answered on a 7-point bipolar scale (disagree[1]/agree[7], $r = .722$, $p < .001$). Similar measures for ad attitudes and ad stereotypicality have been used by e.g. Liljedal, Berg and Dahlen (2020). Study 1 also used a control questions to ensure that the manipulation was successful, asked at the end of the questionnaire. “How active or passive do you think that the people are pictured as in the ad?”, answered on a 7-point bipolar scale (passive[1]/active[7]).

Analysis and Results

To address H1, a t test was used to compare ad stereotypicality for the two ads. As predicted, the ad featuring an active portrayal of older people was perceived as less stereotyped ($M_{\text{passive}} = 2.32$, $SD = 1.47$, $M_{\text{active}} = 4.27$, $SD = 1.46$; $t(78) = -5.98$, $p = .000$). H1 was thus supported. To address H2, a t test was used to compare attitudes for the two ads, showing more positive attitudes towards the ad featuring an active portrayal of older people ($M_{\text{passive}} = 5.47$, $SD = 1.14$, $M_{\text{active}} = 4.77$, $SD = 1.45$; $t(78) = 2.40$, $p = .019$). H2 was thus supported. As expected, participants rated the active ad as more active and the passive ad as more passive ($M_{\text{passive}} = 5.62$, $SD = .82$, $M_{\text{active}} = 1.81$, $SD = .72$; $t(78) = 22.23$, $p = .000$).

Discussion

Study 1 indicates that featuring non-stereotyped age portrayals of older women in advertising has a positive effect on attitudes towards the ad by female consumers. The results of Study 1 showed that ad attitudes were more positive for the fashion ad that featured a non-stereotyped age portrayal of an older woman than for the fashion ad that featured a stereotyped age portrayal of a younger woman. A control question confirmed that the fashion ad featuring an older ad model was perceived as less stereotyped. Responses to non-stereotypical age portrayals in ads were only tested for women in Study 1. Study 2 was conducted with a sample that included both men and women to enable us to investigate whether consumer gender moderates the positive effects on ad attitudes found in Study 1.

Study 2

Study 2 was designed to test H1 using a between-subjects experiment and an online sample of male and female consumers. The purpose of the study was to replicate the findings from Study 1 that women display more positive attitudes towards ads featuring non-stereotyped age portrayals. Additionally, the study was carried out to examine whether consumer gender moderates the positive effects of featuring portrayals of older women in ads.

Stimuli

Study 2 used the same two ads for a fashion brand (Kate Spade) that had previously been used in Study 1.

Participants and Procedure

Study 2 used an online convenience sample of 61 older consumers recruited from Prolific (34 women, 27 men, aged 60–74 years, mean age = 64.48). Participants were each compensated with 1.5 GBP and randomly assigned to experimental groups, so that each participant viewed and answered questions about one of the ads. Attention check questions were used.

Measurements

The same measurements as in Study 1 were used for attitudes towards the ad ($\alpha = .980$) and the manipulation control questions about model age, model age measured on a scale ($r = .94$, $p = .000$), and the degree to which the ads were perceived as stereotyped ($r = .93$, $p = .000$).

Analysis and Results

The older ad model was judged to be older in both years (Molder = 71.49, SD = 6.02, Myounger = 22.25, SD = 3.52; $t(118) = 54.93$, $p = .000$) and on the age scale (Molder = 6.19, SD = .74, Myounger = 1.57, SD = .81; $t(118) = 32.64$, $p = .000$). The ad with an older woman was also seen as less stereotyped (Molder = 2.71, SD = 1.82, Myounger = 3.37, SD = 1.80; $t(78) = -1.99$, $p = .049$). A two-way ANOVA was performed to examine the effects of ad stereotype (older model/younger model) and consumer gender (male/female). The overall test was significant ($F(3,116) = 3.04$, $p = .032$, $\eta^2 = .073$), and so was the main effect of age stereotype ($F(1,116) = 10.02$, $p = .053$, $\eta^2 = .032$; Molder = 5.47, SD = 1.65, Myounger = 4.93, SD = 1.65), but the main effect of consumer gender ($F(1,116) = 2.41$, $p = .340$) was not significant. The interaction effect between the age stereotype and consumer gender was significant ($F(1,116) = 12.96$, $p = .028$, $\eta^2 = .041$). An analysis of contrasts was used to compare attitudes toward the ads among men and women. It revealed more positive attitudes among female consumers for the ad with an older woman (Molder = 5.96, s.e. = .31, Myounger = 4.73, s.e. = .31; $F(1,116) = 8.17$, $p = .005$). H1 was thus supported. However, for the male consumers, there was no difference in attitudes between the experiment conditions (Molder = 5.02, s.e. = .29, Myounger = 5.10, s.e. = .28; $F(1,116) = .04$, $p = .845$).

Discussion

Study 2 indicates that consumer gender acts as a boundary condition for the positive effects of featuring non-stereotyped age portrayals of older women in advertising. Consumer gender moderated the effects of the non-stereotyped age portrayals, so that for the male consumers, there was no difference between ad attitudes for the ads featuring older (non-stereotyped) and younger (stereotyped) female models. The positive effects on ad attitudes for these non-stereotyped age portrayals thus seem to be limited to female consumers. However, it should be noted that there were no negative effects on ad attitudes for male consumers of featuring older female models in advertising. In fact, Study 2 merely indicated that there was no difference for the male participants in ad attitudes between the non-stereotyped and stereotyped age portrayals. The two subsequent studies will continue to focus on the responses of female consumers to non-stereotyped age portrayals of women in advertising in terms of ad attitudes and social connectedness. Study 3 and Study 4 will also compare the effects of featuring non-stereotyped portrayals of older women in advertising between female consumers of different ages and between ads for different product categories.

References

- Berg, H., & Liljedal, K. T. (2023). Why Casting Older Female Models Is Good for Advertising: The Positive Effects of Challenging the Underrepresentation of Older Women in Ads. *Journal of Advertising Research*, 63(1), 61-80. <https://doi.org/10.2501/JAR-2023-001>
- Eisend, M. (2022). Older people in advertising. *Journal of Advertising*, 51(3), 308-322. <https://doi.org/10.1080/00913367.2022.2027300>
- Groeppel-Klein, A., Helfgen, J., Spilski, A., & Schreiber, L. (2017). The impact of age stereotypes on elderly consumers' self-efficacy and cognitive performance. *Journal of Strategic Marketing*, 25(3), 211-225. <https://doi.org/10.1080/0965254X.2017.1299787>
- Liljedal, K. T., Berg, H., & Dahlen, M. (2020). Effects of nonstereotyped occupational gender role portrayal in advertising: How showing women in male-stereotyped job roles sends positive signals about brands. *Journal of Advertising Research*, 60(2), 179-196. <https://doi.org/10.2501/JAR-2020-008>
- Loro, P. S., & Helgeson, J. G. (2013). Boomers and their Babies: An Exploratory Study Comparing Psychological Profiles and Advertising Appeal Effectiveness Across Two Generations. *Journal of Marketing Theory and Practice*, 21(3), 289-306. <https://doi.org/10.2753/MTP1069-6679210304>
- Peer, E., Brandimarte, L., Samat, S., & Acquisti, A. (2017). Beyond the Turk: Alternative platforms for crowdsourcing behavioral research. *Journal of Experimental Social Psychology*, 70, 153-163. <https://doi.org/10.1016/j.jesp.2017.01.006>

Taylor, C. R. (2022). Hitting the mark with active agers: a call for more research on older consumers. *International Journal of Advertising*, 41(7), 1179-1180. <https://doi.org/10.1080/02650487.2022.2112136>

Thayer, C., and Scufca, L. (2019) *Media Image Landscape: Age Representation in Online Images*. Washington, DC: AARP Research. <https://doi.org/10.26419/res.00339.001>

Summary Brief

Aggressive Sales Strategies Can Lead Companies Astray: Marketers Beware

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Introduction

Increasing sales help increase revenue, which leads to higher net income, higher stock prices to boost stock options, and more healthy financial statements. However, too aggressive sales strategies can cause numerous problems for companies. There are six aggressive sales strategies by executives and marketing departments that can create Internal Revenue Service (IRS), Securities Exchange Commission, Department of Justice, and Federal Trade Commission problems:

- Bill-and-hold transactions
- Channel stuffing
- Transfer pricing
- ESG greenwashing
- AI washing
- False advertising and ad fraud

Executives such as Chief Executive Officers and Chief Marketing Officers (CMO) may pressure marketing personnel to engage in these sales strategies. CMOs may help manipulate records to “cook the books” by inflating figures and capitalizing or hiding marketing expenses to increase performance metrics. Marketers should beware that their job or company can be in jeopardy when their company is caught using these aggressive sales techniques.

Background

Bill-and-hold schemes occur when customers agree to purchase goods but the seller retains physical possession of the goods until the customer requests shipment. Bill-and-hold schemes are not necessarily fraud. However, certain conditions must be met, and if not met, the transactions can be considered fraud for deviating from Generally Accepted Accounting Principles (U.S. Accounting Standards Codification 606). A book-for-billing ratio less than one indicates a below average demand for purchases. Marketing personnel must be careful not to be too aggressive with these schemes suggested by top management. Since bill-and-hold schemes may or may not be fraudulent, this area is where marketing practitioners and academicians can be used on both the plaintiff and defendants’ side as consultants and expert witnesses when these issues are litigated in the courtroom.

Sunbeam Corporation became infamous under CEO Al “Chainsaw” Dunlap. Sunbeam offered deep discounts, paid the costs of storage and insurance, and the customers could return the merchandise. Companies such as Revolution Lighting Technologies, Evoqua Water, and Capstone Turbine Corporation have been accused of this scheme. Twenty or more companies have been accused by the SEC of bill-and-hold strategies (Keenan 2025).

Channel stuffing is similar to bill-and-hold schemes, except here the company manipulates financial reports by flooding distributors with merchandise that they cannot readily sell. The company uses extended payment terms or discounts. Bill-and-hold schemes rely on the timing of revenue recognition in relation to delivery of the product. Channel stuffing involves the quantity of merchandise pushed to the buyers.

Another dangerous aggressive sales method involves the pricing of intercompany transactions – called transfer pricing. Coca-Cola Company has been involved in litigation with the IRS regarding transfer pricing issues since 1996. This scheme involves companies attempting to shift income to lower tax bracket countries. Coca-Cola has already paid \$6 billion in back taxes and interest and may have to pay an additional \$12 billion penalty should the penalty stand up on appeal. In this U.S. Tax Court decision, the plaintiff (Coke) had fifteen expert witnesses, and the IRS had ten expert witnesses. Eight of these twenty five experts were marketing professors or practitioners (U.S. Tax Court Coca Cola v. IRS, 2020).

Another area where marketers should be careful occurs “when companies make false and inflated claims about the environmentally beneficial nature of their products, services, or their business generally (Hupart et al. 2023). Called ESG greenwashing or green sniffing, Exxon Mobil was accused of advertising that its experimental algae biofuels could reduce transport emission targets, while not showing any targets (Vanderford 2023). Shareholder class action lawsuits have been filed against a number of greenwashing companies.

A similar sales scheme involves advertising that AI substantially increases efficiencies and effectiveness over human experts (Haefne et al. 2021). Former SEC Chair Gary Gensler warned businesses about making false AI claims, and the FTC warned companies about making these types of claims (LaCroix 2025). The SEC has brought enforcement actions against executives of companies for making false and misleading claims about their use of AI, and this AI washing has implications for marketing departments responsible for the fraudulent financial statements.

Advertisement fraud can involve falsely generating clicks, impressions, or conversions in digital advertising to increase performance metrics. In advertising, marketing personnel may exaggerate marketing claims, conceal negative information, and make false statements to deceive consumers (Sadeghpour and Vlajic 2021).

Conclusion

This paper seeks to discuss how these six aggressive marketing strategies can create severe problems for marketing personnel, CEOs, and CMOs. In addition, when the use of these strategies results in marketing disputes, marketing professors and practitioners can be used as consultants and expert witnesses (i.e., forensic marketers) to support the disputes. Academicians must prepare marketing students to be aware of the dangers of aggressive marketing techniques and teach them how to support as forensic marketers when disputes related to these marketing techniques arise. These issues will have a significant impact on the futurology of the marketing profession.

References

- Haefner, N., Wincent, J., Parida, V., and Gassmann, O. (2021). Artificial Intelligence and Innovation Management: A Review, Framework, and Research Agenda. *Technological Forecasting and Social Change*, 162, 120392.
- Hupart, J., D.P. Baumstein, J. Brines, and W.G. McKitterick, (2023). Greenwashing Class Action Litigation: An Emerging Risk for Companies’ Claims of Sustainability, *National Law Review*, August 4, <https://www.mintz.com/insights-center/viewpoints/2151/2023-08-02-greenwashing-class-action-litigation-emerging-risk>
- Keenan, Neil (2025). Revenue Recognition Frauds for Lawyers: Bill-and-Hold Arrangements, *FRA*, June 30.
- LaCroix, Kevin (2025). Two Companies Hit with Separate AI-Washing Securities Lawsuits, *The D&O Diary*, March 10.
- Sadeghpour, S. and N. Vlajic. (2021). Ad and Fraud: A Comprehensive Survey of Fraud in Online Advertising, *J. Cybersecurity Privacy*, 1(4).
- U.S. Accounting Standards Codification 606.
- U. S. Tax Court, *Coca Cola v. IRS*, 155 T.C. 145 (2020).
- Vanderford, Richard (2023). SEC Head Warns Against “AI Washing,” the High-Tech Version of “Greenwashing,” December 5.

Summary Brief

Talent Management, Artificial Intelligence Adoption, Turnover Intention, and Supply Chain Resilience

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Talent management is a vital component of supply chain performance. Supply chain resilience is critical for supply chain organizations. Research has focused on the physical resources for a supply chain to be resilient during and after disruptions. However, there has been limited research on the human talent component, which is crucial for supply chain organizations to remain resilient. This study explores talent management and its impact on supply chain resilience. Resource-based theory will be used to suggest that talent management, with the mediating effect of turnover intention and the moderating role of artificial intelligence, can impact supply chain resilience. I plan to collect survey data from a random sample of 200 purchasing agents/managers from various professional purchasing organizations and networks to investigate the impact of talent management on supply chain resilience.

Introduction

The struggle to retain talented employees in today's competitive labor market is an ongoing battle. Organizations are experiencing significant global talent shortages (Buchholz, 2024). Research indicates 76% of supply chain operations have been impacted by this talent shortage, per a January 2024 report by Descartes Systems (Straight, 2024). To remain competitive and responsive (Richey et al., 2022) organizations across the supply chain need talented individuals to perform complex tasks such as procurement, compliance, budgeting, auditing, and warehouse/distribution management. Without talented resources, supply chain organizations are susceptible to internal and external threats. Artificial intelligence can be utilized to aid supply chain organizations in their efforts to become resilient in the face of internal threats such as turnover intention. Thus, this study aims to examine the impact of talent management on supply chain resilience with the moderating effect of artificial intelligence and the mediating effect of turnover intention.

Background

Research on talent management is in the human resource domain (Lewis et al., 2006, p. 141). This is not surprising since talent management is a function of human resources (HR) in most organizations. However, little research has been conducted on this topic in the context of the moderating role of artificial intelligence and the mediating effect of turnover intention in relation to supply chain resilience. Supply chain resilience is a topic that has been studied in the literature about recovering from, preventing, or mitigating a supply chain disruption (Gebhardt et al., 2022). The literature does not address internal disruptions such as turnover intention. This gap in understanding how talent management can impact chain resilience is important because it will advance our knowledge of talent management practices and retention efforts in supply chain organizations. Moreover, the findings will shed light on how artificial intelligence can be utilized to improve supply chain resilience efforts in supply chain organizations. The specific focus will be on the following research question: How does supply chain talent management impact supply chain resilience with the moderating role of artificial intelligence and the mediating effect of turnover intention?

Resource-based theory will be applied to examine how talent management impacts supply chain resilience in supply chain organizations. This is an appropriate theory to apply, given that this study is associated with talent management in supply chain organizations. This theory focuses on the importance of a firm's resources and their role in facilitating a competitive advantage for organizations (Conner, 1991). A random sample of 200 purchasing agents/managers will be selected from various professional purchasing organizations and networks to investigate the impact of talent management on supply chain resilience.

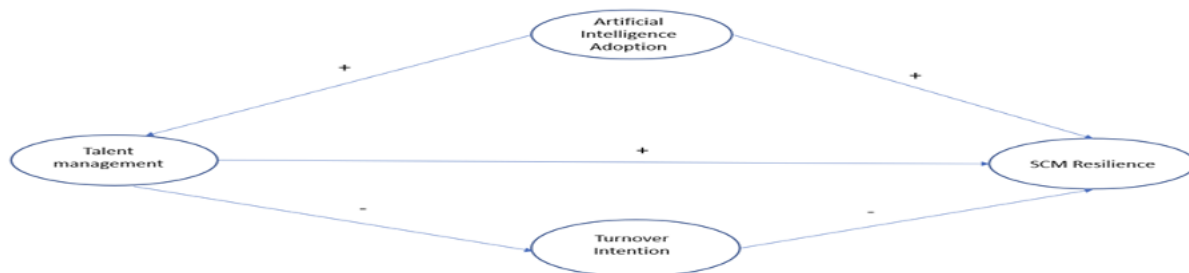
Several contributions will emerge from this research. The first contribution will be to provide a perspective on the impact of talent management on supply chain resilience. The second contribution is to advance research on talent management in the logistics and SCM domain. The third contribution will be to advance the literature on supply chain resilience in the supply chain management domain. The final contribution will be to guide managers on

the importance of artificial intelligence adoption in the management of supply chain talent in supply chain organizations.

Theoretical Model and Hypotheses

Resource-based theory provides a foundation for proposing the theoretical model to be tested in this study (Barney,1991) . PLS-SEM will be executed to examine the relationships between the four constructs (Hair et. al., 2021) . The two-step confirmatory composite analysis (CCA) procedure will be used to confirm the measurement models and evaluate the structural relationships (Hair et. al., 2021) . One construct, artificial intelligence, is hypothesized as a moderator of the relationship between talent management and supply chain resilience, while turnover intention is the mediator of the relationship between talent management and supply chain resilience in this model.

Fig. 1: Theoretical Model



References

- Barney_1991_ FIRM RESOURCES AND SUSTAINED COMPETITIVE ADVANTAGE. (n.d.).
- Conner-1991-a-historical-comparison-of-resource-based-theory-and-five-schools-of-thought-within-industrial-organization. (n.d.).
- Gebhardt, M., Spieske, A., Kopyto, M., & Birkel, H. (2022). Increasing global supply chains' resilience after the COVID-19 pandemic: Empirical results from a Delphi study. *Journal of Business Research*, 150, 59–72. <https://doi.org/10.1016/j.jbusres.2022.06.008>
- Hair, J. F. , S. Marko. , & Ringle, C. M. (2021). Partial Least Squares Structural Equation Modeling. In *Handbook of Market Research* (pp. 1–47). Springer International Publishing. https://doi.org/10.1007/978-3-319-05542-8_15-2
- Katharina Buchholz. (2024). I am a Statista data journalist using charts to explain news topics. Global Staff Shortages Balloon In Just Six Years [Infographic]. <https://www.forbes.com/sites/katharinabuchholz/2024/03/15/global-staff-shortages-balloon-in-just-six-years-infographic/>
- Lewis, R. E., & Heckman, R. J. (2006). Talent management: A critical review. *Human Resource Management Review*, 16(2), 139–154. <https://doi.org/10.1016/j.hrmr.2006.03.001> ≡ menu. (n.d.).
- Richey, R. G., & Davis-Sramek, B. (2022). A research agenda to reflect reality: On being responsive. In *Journal of Business Logistics* (Vol. 43, Issue 1, pp. 4–8). John Wiley and Sons Inc. <https://doi.org/10.1111/jbl.12297>

SESSION 41.5: BRAND BALANCE, BURNOUT, AND THE AI-READY SHOPPER

Moderators:

Vanessa Melton

Summary Brief

Balancing Trend and Tradition: How Universities Adapt Branding for Social Media Without Losing Institutional Identity

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This study examines how universities adapt social media content strategies to incorporate platform trends while preserving institutional identity. A preliminary content analysis of 128 TikTok videos from thirteen universities identified the types of content and stylistic choices used to integrate trends while maintaining brand coherence. Findings show that institutions favor casual, trend-driven formats, with student life and campus events as dominant themes, often embedding brand elements to sustain credibility. Student-led and authentic content generated higher engagement than overly formal posts. The main study will expand the dataset and include interviews with social media managers and prospective freshmen to better understand how adaptation decisions are made and how these strategies influence perceptions of institutional identity.

Introduction

In the digital age, social media platforms have become essential tools for shaping perceptions across sectors, including higher education. Platforms such as TikTok, Instagram, and YouTube are not only where members of Generation Z and Generation Alpha spend significant amounts of time, but also where many form their first impressions of colleges and universities (Shields & Peruta, 2019; Hemsley-Brown & Oplatka, 2015). This shift offers institutions an opportunity to present themselves in ways that resonate with prospective students, positioning social media as a central element of recruitment strategy.

Historically, higher education branding emphasized academic prestige, faculty expertise, and institutional legacy. However, as online and hybrid learning expand students' options, digital brand presence has become a critical differentiator (Chapleo, 2005; Khanna et al., 2014). A prospective student might now weigh the benefits of a smaller institution such as St. Mary's University against the accessibility of online courses from a larger university like UT Austin. This competitive environment heightens the importance of a strong, adaptable digital presence that extends beyond academic offerings.

Universities now face the challenge of maintaining institutional identity while remaining culturally relevant. This tension has given rise to branding strategies that attempt to balance credibility with youth-oriented, trend-driven content. Institutions increasingly experiment with platform-specific trends, such as TikTok dances, memes, and viral sounds, in order to boost engagement while seeking to preserve their core values (Boeker & Urman, 2022).

The present study examines how universities are evolving their branding strategies in response to shifting digital paradigms. Through a review of literature and an analysis of university social media practices, it explores how institutions integrate social media trends to maintain brand consistency and enhance recruitment. The central research question guiding this inquiry is: how are universities adapting content strategies to incorporate social media trends while preserving institutional identity?

Literature Review

Branding in higher education has traditionally emphasized academic rigor, institutional history, and prestige. While these approaches share characteristics with corporate branding, they require tailoring to meet the needs of diverse stakeholders, including students, faculty, alumni, and donors (Ali-Choudhury et al., 2009; Chapleo, 2005). Historically, institutional narratives relied on established markers of excellence such as faculty credentials, rankings, and longevity. However, these strategies have been challenged by a rapidly changing educational

environment that now includes online and hybrid learning options, increasing competition and expanding students' decision-making frameworks.

The transition from traditional branding to digital-first communication has altered the landscape considerably. Khanna et al. (2014) introduced the concept of "brand touchpoints," noting that prospective students form impressions through a variety of interactions, from in-person tours to digital engagement. Inconsistent messaging across departments, as identified by Bunzel (2007), can undermine these impressions, highlighting the need for coordinated communication strategies. Social media has emerged as a central touchpoint in this context, enabling institutions to project a cohesive identity across channels while also responding dynamically to audience expectations.

Research on social media adoption in higher education illustrates an evolution from early use of Facebook for announcements and basic engagement (Shields & Peruta, 2016) to more visually immersive platforms such as Instagram and YouTube, which facilitate emotional storytelling (Maresova et al., 2020). TikTok, with its short-form, algorithm-driven model, has created new opportunities for reach and engagement, particularly for institutions with limited marketing budgets (Peruta & Shields, 2017). By leveraging platform-specific affordances, universities can compete for attention alongside larger, better-funded peers.

However, the rise of trend culture on platforms like TikTok introduces both opportunities and risks. Viral challenges, memes, and audio tracks can expand visibility, but participation must be authentic and well-timed to avoid perceptions of inauthenticity or opportunism (Boeker & Urman, 2022). Studies by Ling et al. (2021) and Rezek (2022) indicate that behind-the-scenes videos, student-led tours, and personal narratives often outperform polished promotional content in engagement, suggesting that audiences value authenticity over formality. This aligns with findings from Throuvala et al. (2022) and Mohapatra and Rout (2024), who argue that Generation Z audiences tend to distrust overly curated messaging, preferring peer-driven, relatable content. Kumar and Mahajan (2024) further note that when institutions attempt to emulate youth culture without student involvement, the result is often perceived as contrived.

Maintaining brand credibility while embracing cultural trends requires strategic coordination and a clear understanding of institutional values. Judson et al. (2004) emphasize the importance of internal alignment among faculty, staff, and communications teams to preserve a consistent brand voice. Zhou and Ishimaru (2024) add that visual consistency across channels strengthens recognition and trust. Effective strategies therefore require balancing trend adoption with brand coherence, integrating student voices into content creation, and adapting messaging to the stylistic norms of specific platforms.

Collectively, this literature underscores a shift in higher education branding from static, prestige-oriented narratives to dynamic, participatory communication models. While the potential of platforms such as TikTok for student recruitment is evident, less is known about how universities incorporate trending content into their branding strategies without compromising institutional identity. This gap informs the present study, which examines how universities use TikTok to integrate platform trends, maintain brand consistency, and engage prospective students.

Methodology

Preliminary research was conducted to identify the types of TikTok content most effective in reinforcing institutional image while appealing to prospective students. TikTok was selected as the focal platform because it is currently the most popular among traditional incoming freshmen (Statista, 2024). Thirteen universities with a significant and consistent presence on TikTok were identified. From these accounts, 128 videos posted during the data collection period were gathered. Each video was coded for thematic content, engagement metrics (likes, comments, views), and descriptive features such as format, text, and audio. This process enabled identification of platform-specific strategies and stylistic patterns unique to TikTok.

General Findings

During the data collection period, the universities examined posted an average of 19 TikTok videos ($SD = 14$). Each video received approximately 4,432 views ($SD = 2,680$), 836 likes ($SD = 1,360$), and 13 comments ($SD = 26$). Approximately 18 percent of videos targeted incoming freshmen, suggesting a strategic emphasis on recruitment during a key admissions period.

The most frequent themes were student life (33.59 percent), campus events (18.75 percent), and participation in trends (18.75 percent). Academic achievements (1.5 percent) and post-college outcomes (1.69 percent) were rarely emphasized, indicating a shift toward lifestyle-oriented branding rather than academic promotion.

Content strategies reflected TikTok's informal, fast-paced aesthetic. Common features included trending audio (65 percent), action-driven visuals (37.5 percent), student appearances (21 percent), and creative editing effects such as green screen (7.8 percent). Many universities adapted popular trends to their own contexts by incorporating mascots, campus landmarks, or school colors, thereby reinforcing brand identity while participating in wider cultural conversations.

The tone of most content was casual, humorous, or self-aware, although some posts adopted a sincere approach, particularly in student testimonials or expressions of school pride. Videos that appeared overly scripted or misaligned with current trends tended to generate less engagement. In contrast, student-created or student-led content generally performed better, supporting the notion that authenticity enhances credibility.

Discussion and Conclusion

These preliminary findings indicate that universities are using TikTok to blend entertainment, community engagement, and brand messaging. While academic prestige and history remain part of institutional identity, the platform encourages a more informal and visually dynamic style of communication aimed at connecting with prospective students.

A central challenge lies in balancing cultural relevance with brand integrity. Posts that relied heavily on trends without grounding them in campus-specific imagery often lacked authenticity, whereas those that integrated recognizable brand elements such as mascots, locations, and student voices were more effective in maintaining credibility. Strategic flexibility appears essential for success in this environment. Institutions that created space for experimentation while maintaining coherence with brand values were better able to adapt to TikTok's participatory culture. Student-led content emerged as particularly effective, supporting existing research on the value of peer-driven storytelling for building trust with Generation Z audiences.

To build on this preliminary analysis and address the research objective more directly, the next phase of the study will focus on a comprehensive understanding of how strategic decisions are made concerning integrating trends while balancing institutional identity on social media. This will involve not only expanding the content analysis to a larger sample of institutions but also conducting interviews with both university social media managers and prospective freshmen. Social media managers can provide insight into the internal processes, brand considerations, and constraints that shape how trends are incorporated, while prospective freshmen can share how these adapted trends influence their perceptions of institutional identity. This combined approach will offer a clearer understanding of the strategies universities use to engage with trends while maintaining brand coherence.

References available upon request.

Full Paper

From Thoughts to Transactions: How Cognitive Valence toward AI Influences Purchase Intention through Attitudes, Appropriateness, and Brand Innovation

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This research examined the relationships between cognitive valence, attitudes toward AI, and consumer outcomes through two experimental studies informed by spreading activation theory and schema congruity theory. Study 1 (N=142) found positive interrelationships between attitudes toward AI, perceived AI appropriateness, brand innovation, and purchase intention. However, Study 1 results did not support cognitive valence predicting any study outcomes directly or indirectly. Study 2 (N=257) built on Study 1 by employing a two-factor (rather than one-factor) attitude toward AI measure distinguishing positive and negative attitude dimensions. Results from Study 2 revealed positive attitudes toward AI fully mediated the effects between cognitive valence and AI appropriateness, brand innovation, and purchase intention. A full serial mediation effect was also observed exclusively through positive attitudes toward AI.

Keywords: artificial intelligence, spreading activation theory, schema congruity theory, attitudes toward AI, AI appropriateness, consumer perceived brand innovation

**SESSION 42.1 PANEL: AI-DRIVEN MARKETING
INNOVATION: PERSONALIZATION, CO-CREATION,
AND ALGORITHMIC GOVERNANCE**

Panelists:

Maria Petrescu

Melanie Richards

Anjala Krishen

John Girona

Ricky Fergurson

Mihai Orzan

SESSION 42.3: FROM WALKWAYS TO WALLET:
DECISIONS THAT SHAPE THE DAY

Moderators:

Catori Griffin

Summary Brief

Using Real Time Analytics to Create the Perfect Customer Experience

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Most studies on customer satisfaction with public venues—such as restaurants, hotels, and retail stores—have primarily examined overall satisfaction or the influence of environmental factors, typically using surveys as the main method of data collection. This study employs a near real-time measurement device to evaluate the impact of crowding and cleanliness on customer satisfaction with public restrooms. In addition to capturing second-by-second quantitative data, the research includes qualitative interviews to offer managerial insights on leveraging real-time feedback for improved operational responsiveness. Results from multiple modeling techniques validate prior findings: cleanliness and crowding are both significant predictors of customer satisfaction, providing strong support for the proposed hypotheses.

Introduction

According to a 2019 survey by the Bradley Corporation, more than 60% of Americans choose businesses based on cleanliness and are willing to spend more at establishments they perceive as clean. Given these economic implications, it is important to examine the factors that influence customer satisfaction with public venues. Academic research shows that restroom cleanliness significantly affects consumer choice and shapes perceptions of overall service quality, particularly in the restaurant industry (Aksoydan 2007). In addition, environmental factors such as crowding influence customer satisfaction at public venues such as retail spaces and dining establishments (Blut and Iyer 2020).

Most studies (Meyer and Schwager 2007; Zaki, McColl-Kennedy, and Neely 2021) have relied on post-experience surveys to assess customer satisfaction, often introducing recall bias and delayed feedback. This paper integrates two lines of inquiry: (1) the influence of cleanliness and crowding on customer satisfaction in public spaces, and (2) the use of real-time, technology-enabled methods to measure satisfaction, as opposed to traditional survey-based instruments. Real-time measurement provides a time-sensitive, anonymized approach that avoids memory decay and privacy concerns commonly associated with web-based or retrospective survey tools. This study aims to demonstrate the impact of customer experience—specifically cleanliness and crowding—in public restrooms on overall customer satisfaction, using real-time measurement tools. It also seeks to identify actionable strategies for improving satisfaction based on these insights.

Literature Review

Customer Satisfaction: Concept

In recent years, the vocabulary used to describe the importance of customers to organizations has significantly expanded. A wide range of customer-centric terms has emerged to reflect various aspects of the customer journey and relationship. These include customer delight (Barnes and Krallman 2019; Oliver, Rust, and Varki 1997), customer experience (Becker and Jaakkola 2020; Meyer and Schwager 2007), customer advocacy (Urban 2005), customer relationship management (Kumar and Reinartz 2018), customer loyalty (Duffy 1998), and customer retention (Rust and Zahorik 1993).

Alongside the growing complexity of customer-focused terminology, a diverse array of methods has also developed to measure customer satisfaction (Macdonald, Wilson, and Konus 2012), each aiming to capture different dimensions of how customers perceive and evaluate their experiences. Customer satisfaction is often treated as a catch-all term that encompasses the attitudes, emotions, and, in some cases, behaviors (e.g., retention and advocacy) that result from a customer's interactions with a company or product. It represents the minimum expected outcome of such attitudes and feelings as a result of customer experience with a firm's products and processes (Hill, Roche, and Allen 2007). Customer satisfaction thus serves as a measure of the overall result of multiple experiences. Despite industry emphasis on delivering exceptional experiences, there exists a substantial perception gap: as reported by Bain & Company and cited by Meyer and Schwager (2007), while 80% of companies believe they deliver superior customer experiences, only 8% of customers agree.

The link between improvements in product or service attributes and customer satisfaction—ultimately leading to greater retention and profitability—is well established (Mathe-Souleik, Slevich, and Dallinger 2015). However, this relationship is neither linear nor symmetric (Anderson and Mittal 2000). Some attributes function as “must-haves,” where failure results in dissatisfaction, but fulfillment does not necessarily increase satisfaction. Others are “satisfiers” that enhance satisfaction when present but may not cause dissatisfaction when absent.

Therefore, understanding which attributes drive satisfaction—and the optimal, not maximal, levels of performance—is essential for effective resource allocation and operational efficiency. Within industries like hospitality or food service, these key attributes may differ across segments. For instance, in the restaurant sector, expectations vary by type of establishment, necessitating context-specific investigation (Mathe-Souleik, Slevich, and Dallinger 2015). Cleanliness was one of the dimensions discovered to be important as an attribute contributing to customer satisfaction, along with factors such as taste, food temperature, speed of service, accuracy, ease of understanding etc. Their research highlights the value of integrating qualitative and quantitative data to distinguish between attributes that prevent dissatisfaction and those that actively enhance satisfaction.

Impact of Physical and Social Environment on Customer Satisfaction

A robust body of research supports framing customer experience as a function of physical environment and social encounters (e.g., Ali and Omar 2014; Bitner 1990). Some of the most commonly studied dependent variables in an extensive overview of research in this area are cited to be sales, time spent in the environment, and approach/avoidance behavior, among others such as customer satisfaction (Turley and Milliman 2000).

The physical environment, encompasses tangible and sensory elements such as ambient conditions (e.g., lighting, temperature, scent, and noise), spatial layout and functionality, as well as aesthetic elements like color schemes, décor, and symbolic signage. These attributes do more than provide functional utility; they shape emotional and cognitive responses that influence perceptions of quality, comfort, and brand identity. Barber and Scarcelli (2009) identified several specific factors that shape consumers’ evaluations of restroom cleanliness, including whether toilets are wet or soggy, and the availability of toilet paper and soap. The importance of restroom cleanliness is not limited to restaurants but extends across industries such as retail, hospitality, lodging, transportation, and cruise services, where public hygiene is increasingly viewed as a core element of the service experience. The importance of the physical environment on customer satisfaction has been found to be significant—sometimes even more so than social interactions. For example, in the context of resort hotels, Ali and Omar (2014) found that the physical environment, including cleanliness, had a stronger effect on customer satisfaction and revisit intentions than the social environment.

Parallel to this, the social environment involves interpersonal dynamics, including interactions with service personnel and fellow customers (e.g. Ali and Omar 2014; Blut and Iyer 2020). These interactions contribute to the perceived social climate of the service experience and can either enhance or detract from satisfaction, depending on their nature (e.g., friendliness, professionalism, crowding, or customer misbehavior).

A number of researchers have studied crowding as a multi-dimensional construct influencing customer satisfaction. A key distinction in the literature is between human crowding—the presence and number of people—and spatial crowding, which relates to the perceived adequacy of physical space (Mehta 2013; Stokols 1972).

Stokols (1972) conceptualized crowding not merely as a function of density but as an interaction between physical, social, and psychological dimensions. While the number of people and size of the space are important, individual psychological responses also play a critical role. For instance, the presence of strangers versus friends, a person's tolerance for close proximity, or even mood and purpose of visit can shape how crowding is perceived. Additionally, environmental factors, such as how space is arranged or whether the area is cluttered or disorganized, influence perceptions of spatial crowding.

In the context of public restrooms, a poorly maintained or untidy space—such as one with overflowing trash or missing supplies—may exacerbate the perception of crowding, even if the objective density remains low. This illustrates how perceptions of crowding are not solely based on the number of users but are also shaped by cleanliness, layout, and supply availability.

Given that public restrooms are inherently utilitarian spaces, the negative effects of spatial crowding are likely to be more salient, and the potential positive impact of human crowding less applicable. Furthermore, human crowding tends to have a more favorable influence in environments characterized by cooperative behavior and supportive staff, and a less favorable impact in settings perceived as competitive or impersonal. A public restroom, where interactions are minimal, privacy is valued, and support is rarely provided by staff, is more likely to amplify the negative emotional consequences of human crowding.

Based on the preceding discussion sections, the following hypotheses are proposed regarding the effects of crowding and perceived cleanliness on customer satisfaction in public restroom environments:

H1: Perceived cleanliness is positively associated with customer satisfaction in public restrooms; higher levels of perceived cleanliness will correspond to higher levels of customer satisfaction.

H2: Perceived crowding is negatively associated with customer satisfaction in public restrooms; higher levels of perceived crowding will correspond to lower levels of customer satisfaction.

Methodology

The data used in this study was collected over one year using a standalone device placed in the restroom of a university building in Finland, located near several restaurants. The device, manufactured by HappyOrNot™, a global company specializing in real-time customer sentiment tools, allows users to provide immediate feedback by pressing one of four large emoji buttons.

The goal of using such devices is to capture customer satisfaction at the exact time and location of the experience. Unlike post-experience surveys, this method enables users to quickly and anonymously express how they feel in the moment, offering more authentic, emotion-based data. In addition to recording satisfaction levels, the device logs the date and time of each response, providing insights into response volume and patterns over time. This continuous, time-stamped feedback offers a richer and more immediate view of customer experience compared to traditional survey methods administered over longer intervals.

Operationalization of Measures and Models

The objective of this research is to examine how physical and social environmental factors—specifically restroom crowding and cleanliness—affect customer satisfaction within a public venue, using real-time feedback data. Crowding is operationalized as the number of restroom visits within specified time intervals (e.g., by hour or day), while cleanliness is inferred from the timing and frequency of cleaning and supply replacement, which are known to vary across the week. The device's capacity to record the exact time and day of each response enables aggregation of visit counts at multiple temporal intervals, offering a quantitative measure of crowding. Furthermore, by aligning the timing of cleaning schedules with customer responses, it is possible to investigate temporal patterns in satisfaction that may be attributable to maintenance practices.

Given that both visitor volume and cleaning routines fluctuate by day and hour, the analytical model incorporates the following independent variables: cumulative number of visits (as a proxy for crowding), time of day, and day of week. Notably, prior research suggests that both physical density (crowding) and temporal aspects of maintenance (cleanliness) can significantly shape customer perceptions and reported satisfaction in public settings.

Thus, using the data from the device, and based on our hypotheses, the proposed regression model is specified as: Customer satisfaction = $\alpha + \beta_1(\text{number of visits}) + \beta_2(\text{time of day}) + \beta_3(\text{day of week}) + \epsilon$ where α is a constant and β_i ($i=1$ to 3) are coefficients associated with the independent variables and ϵ is the error term.

This modeling framework allows for the evaluation of both direct and temporal effects on satisfaction, using second-by-second real-time measurement—addressing key limitations of traditional, retrospective survey methods. An alternative base model that includes only time and day of visits was also examined for comparison purposes to test model improvement for the proposed model.

Data and Results

The data contained 3393 responses over the period of one year. The machine generated data included date, time (captured up to hours, minutes, and seconds), month, day of week, and the individual response capturing level of customer satisfaction. Recorded data indicated entries from 10 am to 5:46 pm which reflected the hours that the

building in which the restroom was located was visited. Time and day of visit were treated as dummy variables. Customer satisfaction emoji scale was recorded automatically in the data as “Very Unhappy”, “Unhappy”, “Happy” and “Very Happy.” Customer satisfaction was recoded as a numeric variable from 1 to 4 with 1 representing “Very Unhappy” and 4 representing “Very Happy” for the purpose of the analysis. The number of visitors was captured as cumulative total number of visits per day and it was a surrogate for crowded environment, as was the time of day.

Key Findings

In the main model, we included total daily visits as a computed variable to capture the level of crowding, alongside the time of day and day of week as dummy variables. This model achieved a slightly high adjusted R-square of 0.2737 and a lower AIC score of 10206 (the comparison alternate model had a lower adjusted R-square of 0.2707 and a higher AIC score of 10219) and revealed a statistically significant negative relationship between the number of visitors and customer satisfaction, indicating that increased crowding is associated with lower satisfaction. The day of the week showed the strongest association with customer satisfaction, with higher satisfaction on weekdays compared to Sunday (the reference category). Time of day also exhibited a negative, though smaller, effect on customer satisfaction relative to 10am (the reference category), with satisfaction improving around 3pm. There was no significant difference among individual weekdays, but a noticeable difference when comparing weekdays to weekends.

These findings suggest that cleaning had a greater influence on customer satisfaction than crowding, a conclusion supported by a qualitative interview with the manager responsible for sanitation services. The total number of visits was negatively associated with customer satisfaction and this relationship was statistically significant. Among all factors, day of the week had the largest effect on customer satisfaction, followed by time of day, reinforcing the greater impact of cleaning on customer satisfaction compared to crowding.

Conclusion and Limitations

While nearly all prior research has relied on post-visit surveys to assess customer satisfaction, this method can be affected by memory decay and may fail to fully capture the immediate emotions experienced by consumers. This study employs a novel real-time approach to measuring customer satisfaction, utilizing an emoji-based scale to assess the effects of cleanliness and crowding on customer satisfaction with public restrooms. In addition, this study considers both cleanliness and crowding using a modeling approach to assess the relative impact of both factors on customer satisfaction. The findings not only corroborate earlier research but also demonstrate that real-time measurement can guide operational adjustments aimed at enhancing customer satisfaction.

This study has several limitations. Although capturing customer satisfaction in real time using an emoji scale is efficient and convenient for both companies and consumers, this parsimonious method limits insight into the underlying reasons for respondents’ choices.

However, real-time responses that record the time at the site are valuable for conducting post-response analyses to inform operational improvements. This approach differs from traditional surveys, which may not uncover the causes behind lower or higher satisfaction levels. Combining real-time measurement with methods such as qualitative interviews or periodic quantitative surveys could help address the limitations of using any single method alone.

Declarations

Conflict of interest: The authors have no conflicts of interest to declare that are relevant to the content of this article.

References

- Aksoydan, E., (2007). Hygiene factors influencing customers’ choice of dining out: Findings from a study of university academic staff. *Journal of Food Safety*, 27(3), pp.300-316.
- Ali, F. and Omar, R., (2014). Determinants of customer experience and resulting satisfaction and revisit intentions: PLS-SEM approach towards Malaysian resort hotels. *Asia-Pacific Journal of Innovation in Hospitality and Tourism (APJIHT)*, 3(2), pp.1-19.
- Anderson, E. W and Mittal, V. (2000). Strengthening the satisfaction-profit chain. *Journal of Service Research*, 3(2), 107-120.

- Barber, N. and Scarcelli, J. M. (2009). Clean restrooms: how important are they to restaurant consumers? *Journal of Foodservice*, 20(6), 309-320.
- Barnes, D. C., & Krallman, A. (2019). Customer delight: A review and agenda for research. *Journal of Marketing Theory and Practice*, 27(2), 174-195.
- Becker, L., & Jaakkola, E. (2020). Customer experience: fundamental premises and implications for research. *Journal of the Academy of Marketing Science*, 48(4), 630-648.
- Bitner, M. J. (1990). Evaluating service encounters: The effects of physical surroundings and employee responses. *Journal of Marketing*, 54(2), 69-82.
- Blut, M. and Iyer, G.R, (2020). Consequences of Perceived Crowding: A Meta-Analytical Perspective. *Journal of Retailing*, Volume 96, Issue 3, 362-382.
- Bradley Corporation (2019). Most consumers will spend more at businesses with clean restrooms, <https://www.prnewswire.com/news-releases/most-consumers-will-spend-more-at-businesses-with-clean-restrooms-300815601.html>, accessed August 30, 2023.
- Duffy, D. L. (1998). Customer loyalty strategies. *Journal of Consumer Marketing*, 15(5), 435-448.
- Hill, Nigel, Greg Roche and Rachel Allen (2007). Customer Satisfaction: The customer experience through the customer eyes. London: Cogent Publications.
- Kumar, V., & Reinartz, W. (2018). *Customer Relationship Management: Concept, Strategy, and Tools*. Springer.
- Macdonald, E., Wilson, H.N. and Konus, U. (2012). Better customer insight-in real time (Vol. 90). Harvard Business School Publishing.
- Mathe-Souleik, K., Slevitch, L., & Dallinger, I. (2015). Applying mixed methods to identify what drives quick service restaurant's customer satisfaction at the unit-level. *International Journal of Hospitality Management*, 50, 46-54.
- Mehta, R (2013). Understanding perceived retail crowding: A critical review and research agenda. *Journal of Retailing and Consumer Services* 20, no. 6: 642-649.
- Meyer, C. and Schwager, A. (2007). Understanding customer experience. *Harvard Business Review* Vol. 85, No. 2, pp. 117-126.
- Oliver, R. L., Rust, R. T., & Varki, S. (1997). Customer delight: foundations, findings, and managerial insight. *Journal of Retailing*, 73(3), 311-336.
- Reichheld, F.F. (2003). The one number you need to grow. *Harvard Business Review*, 81(12), pp.46-55.
- Rust, R. T., & Zahorik, A. J. (1993). Customer satisfaction, customer retention, and market share. *Journal of Retailing*, 69(2), 193-215.
- Stokols, D. (1972). A social-psychological model of human crowding phenomena. *Journal of the American Institute of Planners*, 38(2), pp.72-83.
- Turley, L. W., & Milliman, R. E. (2000). Atmospheric effects on shopping behavior: a review of the experimental evidence. *Journal of Business Research*, 49(2), 193-211.
- Urban, G. L. (2005). Customer advocacy: a new era in marketing? *Journal of Public Policy & Marketing*, 24(1), 155-159.

Zaki, M. Janet R. McColl-Kennedy, and A. Neely (2021). Using AI to Track How Customers Feel — In Real Time, May 4th, HBR.org.

Full Papers

Beyond the Paycheck: How Housing and Financial Literacy Shape Young Adults' Financial Wellness

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This study examines how housing conditions and income levels influence financial wellness among young adults using survey data from 229 participants. Grounded in Conservation of Resources (COR) theory, findings reveal that housing instability significantly predicts financial stress, while income level does not—likely due to lifestyle inflation. Results suggest that raising income alone is insufficient without financial education and housing support. The study highlights the importance of structural interventions, such as affordable housing and integrated financial literacy programs, to enhance financial resilience. These findings inform policy strategies aimed at reducing economic stress and promoting long-term financial wellness in young adult populations.

Introduction

Financial wellness among young adults presents not only an economic challenge but also a societal one, with long-term implications for workforce productivity, economic mobility, and public policy (Shim et al., 2020). As young adults struggle with housing affordability, student debt, and job precarity, policymakers must consider interventions that address structural economic barriers. Gen Z consumers are overworking themselves to avoid financial strain, with 31% skipping rest and 27% avoiding vacation time (Bread Financial, 2023). More than 80% of adults under 30 report that buying a home, saving for the future, and paying for college are more difficult today (Pew Research Center, 2022). These burdens are reflected in rising stress levels: the American Psychological Association (2023) found that 82% of young adults identify health and money as major concerns, with economic and housing-related stressors increasing significantly since 2019. These challenges compromise the ability of young adults to focus on academics, financial stability, and mental wellness.

This study applies Conservation of Resources (COR) theory to examine how financial wellness manifests in young adults' lives. COR theory posits that individuals seek to acquire and protect resources—such as time, money, and shelter, and that stress arises when these resources are threatened or depleted (Alvaro et al., 2010). We explore how structural solutions, including housing assistance and financial literacy, can protect against resource loss and reduce long-term financial strain.

Literature Review & Theoretical Framework

Prior research on financial unwellness among young adults has predominantly focused on individual coping mechanisms. While these strategies offer short-term relief, they often overlook the structural roots of financial distress. In contrast, public policy interventions—such as financial literacy programs, rent control, and housing assistance—aim to address systemic barriers that impact economic well-being (Yeboah & Shelley, 2024). These policies operate across local, state, and federal levels, and include initiatives like tax incentives for first-time homebuyers and mandatory financial education programs. Policies that promote financial literacy can bridge knowledge gaps and help young adults make informed economic decisions. When integrated with housing support or student loan relief, such policies can enhance long-term financial wellness. This aligns with the Conservation of Resources (COR) theory, which emphasizes that stress emerges when key resources are threatened or depleted. Policy solutions that strengthen resource retention are therefore essential to reducing financial stress (Fernandes et al., 2014). COR theory, developed by Hobfoll, posits that individuals strive to conserve critical resources such as time, money, and shelter. When these resources are lost or access is compromised, stress intensifies (Alvaro et al., 2010). For young adults, particularly college students, the financial demands of tuition, rent, and basic living expenses can rapidly erode available resources, leading to chronic stress. Rising living costs—including housing, food, and transportation—further compound this strain. Many students attempt to compensate through employment, but excessive work hours can diminish academic focus and overall well-being, creating a cycle of depletion (Darolia, 2014).

Macroeconomic pressures like inflation and reduced institutional support can exacerbate this pattern. COR theory provides a useful lens for understanding how systemic conditions—and not just individual behaviors—fuel financial instability in young adults.

Financial Support

The availability of financial support serves as a protective resource that shields individuals from potential harm when facing increased financial expenses. According to the Conservation of Resources (COR) theory, the loss or insufficiency of financial support places pressure on young adults to take action to secure alternative funding, triggering resource conservation behaviors. Financial support can include scholarships, grants, parental assistance, work-study programs, and loans. While these resources can alleviate financial burdens, they are often inadequate for many students. Kelly (2024) highlights that young adults are increasingly reliant on parental financial support due to limited job opportunities and rising living and educational costs. However, inconsistent or unreliable financial support can heighten their vulnerability to financial stress. When such support is lacking, individuals may be forced to seek financial stability through other means, such as working additional hours or living on a significantly reduced budget.

Employment Hours

Time is used to obtain financial resources through employment or other methods of generating income. When increased financial resource consumption arises, more time is needed to produce a larger financial resource pool. COR theory states that time is a limited resource, which, when threatened, will decrease financial wellness. The number of hours students work significantly impacts their stress levels. Employment plays a dual role: while it provides income, excessive work hours compromise time, another critical resource. Dundes and Marx (2006) found that students working 10–19 hours per week performed better academically than their non-working peers. However, exceeding 20 hours led to burnout and academic decline. When financial aid is insufficient, students are often forced to extend work hours, intensifying stress by reducing rest, study time, and overall well-being.

Expansions of COR Theory

COR theory demonstrates the cause and effect that these terms have on the individual's financial wellness. These factors expand COR theory by linking them to protective resources. Changes in any of these areas directly affect stress levels. As the cost of living increases, more money is spent, causing resource loss. The loss of financial support systems is the removal and the threat of resources. As employment hours increase, so do the resources of time lost. These sections usually can build off from one another, leading to a tremendous loss of resources (Hobfoll et al., 2018). Hobfoll (2017) says the value of a resource can be explained on a basic level by its necessity for survival, and that primary resources such as food, health, housing, and clothing are directly related to survival. Increasing the cost of living and employment hours decreases these survival resources; this causes the conservation of resources, creating the byproduct of financial hardship. As financial support decreases, the total number of resources also decreases, leading to weaker financial wellness, as explained by COR Theory.

H1: Income level alone does not significantly predict financial well-being due to mediating factors such as lifestyle inflation.

H2: Stable housing conditions are associated with higher levels of financial well-being among young adults.

Methodology

An online survey was distributed to young adults in the United States, primarily focusing on students at Northern Michigan University (NMU). The NMU student body, composed largely of individuals aged 18–24, reflects national trends in youth demographics and financial diversity—35% identify as first-generation college students. These characteristics make the sample reasonably representative of young adult populations nationwide. Of the 275 responses collected, 229 were deemed complete and viable after excluding surveys with less than 80% completion. The questionnaire included items on financial wellness, income, employment, housing conditions, and demographic details. To improve completion rates, the survey began with financial wellness questions, followed by sections on income and housing, and ended with demographic items. All questions were designed to be accessible and easy to interpret.

Financial wellness was assessed through a composite score derived from survey items related to financial anxiety, sleep disturbances, and difficulty saving. Individual responses were summed into an overall financial

wellness score, with higher totals indicating greater financial distress and lower scores reflecting stronger financial well-being. Income level was recorded using categorical brackets. Housing conditions were measured through a separate composite score based on stability, affordability, and quality of living environment. Similar to the financial wellness metric, higher housing scores signify more adverse housing situations. Together, these measures provided a reliable and analyzable overview of participants' financial well-being, income, and housing status.

Results

A simple linear regression analysis tested the relationship between income and financial wellness. The analysis revealed no statistically significant relationship ($F(1,169) = 1.569$, $p = .212$), with an R^2 of .003. Although income was not a significant predictor ($R^2 = .003$), housing conditions explained 10% of the variation in financial wellness—a notable effect in behavioral economics research. This supports the argument that addressing housing directly impacts well-being, whereas income changes may be absorbed by lifestyle inflation. The regression analysis for housing and financial wellness yielded significant results ($F(1,226) = 25.323$, $p < .001$), with an R^2 of .101. Housing instability accounted for 10% of the variability in financial stress. Participants with stable and affordable housing reported lower financial stress levels, highlighting the critical role of housing in financial well-being.

The findings reveal that housing conditions significantly influence financial wellness among young adults, while income levels show no direct effect. This suggests that policies aimed solely at increasing wages may fall short unless paired with initiatives that improve financial literacy and budgeting skills. The strong link between housing instability and financial stress highlights the need for targeted interventions—such as rent control, subsidized student housing, and support for low-income renters. One explanation for the weak relationship between income and stress is lifestyle inflation: as earnings increase, so do discretionary expenses, often negating potential financial relief (Brown et al., 2005). Amasino (2023) found that individuals with larger budgets tend to make quicker spending decisions, leading to increased consumption. Without adequate financial education, young adults may unintentionally escalate their spending as income grows, limiting opportunities for savings and long-term stability. Over time, sustaining an elevated lifestyle without robust planning can lead to financial vulnerability. Houston (2017) notes that allocating more income toward lifestyle maintenance leaves individuals less prepared for emergencies and delays progress toward financial goals.

From the perspective of Conservation of Resources (COR) theory, financial unwellness results not only from resource scarcity but also from poor resource management. Rising living costs, impulsive spending, and lack of planning all contribute to the erosion of financial stability. These findings underscore the importance of integrating financial literacy programs into broader policy efforts to build long-term financial resilience in young adults.

Discussion & Conclusion

The findings indicate that housing conditions are a more influential determinant of financial wellness among young adults than income. While higher wages may appear to offer relief, the absence of financial literacy and responsible spending behaviors often prevents income gains from translating into greater financial security. This underscores the need for integrated strategies that combine financial education with structural support. Financial literacy programs can play a crucial role in increasing financial wellness by equipping students with budgeting, saving, and risk management skills. Research shows these programs have a moderate but meaningful effect on young adults' financial behaviors (Yeboah & Shelley, 2024). To be most effective, financial education should begin in high school and continue through college, enabling students to develop long-term financial habits and avoid lifestyle inflation. Addressing financial wellness requires a multifaceted policy approach. Governments and educational institutions should collaborate to expand access to affordable housing, offer targeted rent subsidies, and develop financial literacy mandates within curricula. A strong model for this is Tennessee's statewide requirement for a semester-long personal finance course in high schools (Tennessee Board of Education, 2025). This curriculum emphasizes key financial skills such as budgeting, borrowing, investing, and long-term planning. Similar policies have been adopted or considered by other states due to the program's documented success in improving financial awareness. Implementation challenges remain, including educator training and stakeholder buy-in. To address these barriers, schools could offer flexible delivery formats, such as online modules or after-school workshops. Simulation-based learning tools and community partnerships may also enhance program accessibility. Together, comprehensive housing policies and robust financial education initiatives can empower young adults to make informed decisions, reduce economic stress, and build long-term financial resilience. On a broader scale, improving financial literacy may contribute to reduced bankruptcy rates, increased household savings, and a more financially stable society.

This study highlights the urgent financial challenges facing young adults and emphasizes the need for targeted policy solutions. While increasing wages alone may not reduce financial stress, improving housing affordability and integrating financial literacy into education systems can significantly strengthen young adults' financial well-being (APA, 2023; Yeboah & Shelley, 2024). Early financial education helps prepare individuals for major life decisions, such as purchasing a home or managing student loans, and can prevent stress-inducing financial missteps. Future research should explore regional variations in housing stress, the influence of parental financial socialization, and the long-term effects of financial education. Qualitative methods—such as focus groups or interviews—could offer deeper insights into young adults' lived experiences. Additionally, longitudinal studies would help assess how financial well-being and hardship evolve over time, informing more tailored and effective public policy. A deeper understanding of these dynamics will support the development of smarter interventions, helping young adults achieve lasting financial stability and resilience.

Table 1

Regression Coefficients Predicting FW from Income Level

Model		B	SE B	Sig.	R ²
1	(Constant	7.572	.900		
	Income Level	.273	.218	.212	.003

Note. FW = Financial well-being score.

Table 2

Regression Coefficients Predicting FW from Housing Score

Model		B	SE B	Sig.	R ²
1	(Constant	7.572	.900	<.001	
	Housing Score	.525	.218	<.001	.101

Note. FW = Financial well-being score.

References

- Alvaro, C., Lyons, R. F., Warner, G., Hobfoll, S. E., Martens, P. J., Labonté, R., & Brown, R. E. (2010, October 20). Conservation of Resources Theory and research use in Health Systems. *Implementation science : IS*. <https://pmc.ncbi.nlm.nih.gov/articles/PMC2978118/>
- Amasino, D. R., Dolgin, J., & Huettel, S. A. (2023). Eyes on the account size: Interactions between attention and budget in consumer choice. *Journal of Economic Psychology*, 94, 103868. <https://doi.org/10.1016/j.joep.2023.103868>
- American Psychological Association. (n.d.). Stress in America 2023: A nation recovering from collective trauma. American Psychological Association. <https://www.apa.org/news/press/releases/stress/2023/collective-trauma-recovery>
- Bread Financial. (2023, November 14). Financial and mental health survey. Bread Financial. <https://newsroom.breadfinancial.com/financial-and-mental-health-survey>
- Brown, S., Taylor, K., & Price, S. W. (2005). Debt and distress: Evaluating the psychological cost of credit. *Journal of Economic Psychology*, 26(5), 642–663.
- Darolia, R. (2014). Working (and studying) day and night: Heterogeneous effects of working on the academic performance of full-time and part-time students. *Economics of Education Review*, 38, 38–50.

- Dundes, L., & Marx, J. (2006). Balancing work and academics in college: Why do students working 10 to 19 hours per week excel? *Journal of College Student Retention: Research, Theory and Practice*, 8(1), 107–120. <https://doi.org/10.2190/7UCU-8F9M-94QG-5WWQ> J
- Fernandes, D., Lynch, J. G., & Netemeyer, R. G. (2014). Financial literacy, financial education, and downstream financial behaviors. *Management Science*, 60(8), 1861–1883.
- Hobfoll, S. E. (2017). Conservation of resources theory: Its implications for stress, health, and community. Springer Science & Business Media. https://doi.org/10.1007/978-1-4614-6435-8_125
- Hobfoll, S. E., Halbesleben, J., Neveu, J. P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual review of organizational psychology and organizational behavior*, 5(1), 103-128.
- Houston, M. (2024, June 27). Lifestyle inflation: The silent drain on your finances. *Forbes*. <https://www.forbes.com/sites/melissahouston/2024/06/27/lifestyle-inflation-the-silent-drain-on-your-finances/>
- Kelly, J. (2024, February 19). Young Americans may face a financial future less fortunate than their parents. *Forbes*. <https://www.forbes.com/sites/jackkelly/2024/02/02/young-americans-may-face-a-financial-future-less-fortunate-than-their-parents/>
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44.
- Pew Research Center. (2022, February 28). Most in the U.S. say young adults today face more challenges than their parents' generation in some key areas. Pew Research Center. <https://www.pewresearch.org/short-reads/2022/02/28/most-in-the-u-s-say-young-adults-today-face-more-challenges-than-their-parents-generation-in-some-key-areas/>
- Shim, S., Barber, B. L., Card, N. A., Xiao, J. J., & Serido, J. (2010). Financial socialization of first-year college students: The roles of parents, work, and education. *Journal of Youth and Adolescence*, 39(12), 1457–1470.
- Tennessee Department of Education. (n.d.). Personal finance standards for career and technical education. Tennessee Department of Financial Institutions. https://www.tn.gov/content/dam/tn/financialinstitutions/images/DOE-TN-cte_std_personal_finance.pdf
- Yeboah, C., & Shelley, K. (2024). The effectiveness of financial literacy programs in U.S. high schools: Comprehensive meta-analysis. Educational Research/RESA, University of Southern Mississippi. <https://doi.org/10.2139/ssrn.4909967>

Summary Brief

An Exploration of Non-Voting Behaviors among Gen Z Consumers: Beyond the Impact of Social Media

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Introduction

Generation Z represents one of the most politically aware yet paradoxically under-engaged demographics in America. Despite their strong presence on social media and interest in social issues, around half (53%) of Gen Z voters did not participate in the 2024 U.S. presidential election (CIRCLE, 2005). While much research has explored how social media can mobilize voters, fewer studies have examined how social media messaging might discourage voter participation, especially among those who ultimately choose not to vote. The purpose of this study is to examine the contributing factors in discouraging voter participation among eligible Generation Z individuals in the 2024 U.S. presidential election who opted not to vote. By investigating the factors contributing to non-voting, this study is intended to identify the social, societal, and systemic influences that may have shaped this decision. Additionally, it explores how feelings of helplessness, lack of control over outcomes, lack of knowledge about voting procedures, or marginalization contribute to inaction. This study also examines whether social media plays a role in capitalizing on existing motivators of voter inaction and how that influences non-voting behavior. The research is guided by the following questions:

1. Explore what drove Gen Z who did not vote in the 2024 U.S. presidential elections not to vote, and more specifically, explore the role social media played in this non-voting decision; while accounting for the influence of personal, societal, and systemic factors that influence voting behaviors (e.g., community or religious groups, race and ethnicity, education, and logistics barriers).
2. Evaluate Gen Z consumers' exposure to different message strategies aimed at demotivating them and convincing them not to vote (e.g., lesser of two evils argument) and evaluate the perceived effectiveness of these message strategies.
3. Investigate the influence of political content from politicians on social media (e.g. fear-mongering, opposition criticism) on non-voting behavior.

Literature Review and Conceptual Background

This study is grounded in the calculus-of-voting model (Downs, 1957), which expresses that individuals decide to vote when the perceived probability of their vote making a difference, multiplied by the perceived benefits of the election outcome, outweighs the costs of voting. If individuals believe their vote has little impact or that the outcome will not significantly affect their lives, they may be less likely to vote. This can be amplified by proximity to social, educational, and logistical barriers, such as a lack of information and fear of shame. Additionally, this foundational voter behavioral model suggests that individuals are less likely to vote when they perceive the costs (e.g., time, information, effort) to outweigh the benefits, particularly if they believe their vote will not influence the outcome. These costs may be exacerbated by modern disillusionment, apathy, or logistical barriers such as confusion about registration procedures. Recent studies have shown that 30% of unregistered Gen Z individuals in the 2024 election did not vote simply because they were unaware of how to register, despite intentions to vote in the future (Ammassari et al., 2025).

Concurrently, Gen Z's political engagement is heavily shaped by social media. The 1 Two-Step Flow of Influence model (Nichols, 2020) suggests that individuals are more influenced by opinion leaders, who historically were figures like preachers, professors, or lawyers, but in modern times include social media influencers. This suggests that social media messaging, now more than ever, plays a critical role in shaping political beliefs and attitudes, with the potential to completely discourage Gen-Z voters. While existing research has thoroughly explored how social media can mobilize political participation, fewer studies have examined its capacity to demobilize or

discourage voters, specifically among Generation Z. Much of the literature centers on the general voting population or on positive engagement strategies, rather than the mechanisms that lead to voter disengagement or intentional abstention.

Nevertheless, research shows that emotionally charged or conflict-driven political content is more likely to go viral than neutral, fact-based information (Sahly et al., 2019), increasing the reach and impact of messages that frame voting as negative or corrupt. Political campaigns have also adopted social media as a tool for shaping public perception, yet the effectiveness of negative messaging strategies, such as framing candidates as equally harmful (“lesser of two evils”) or promoting systemic distrust (“the system is rigged”), has been largely underexamined in scholarly work. The frame-building theory (Entman, 1993) can provide a useful lens for understanding how such messages influence perception and behavior. By selectively emphasizing themes of helplessness or alienation, social media messaging may contribute to disengagement among young voters. This is particularly true for Gen Z, who often report distrust in the electoral system and are more susceptible to misinformation spread through social media (Ammassari et al., 2025).

This study addresses the current gaps in the literature by focusing on Gen Z non-voters and examining both the message types they encountered and the underlying psychological, structural, and informational barriers that led to their abstention. The study extends existing research on extrinsic motivators of voting, such as social pressure and community norms (Gerber et al., 2017), and the limited research on how social media could actively discourage voting, whether intentionally or not. In doing so, it contributes to a growing but still underdeveloped body of research at the intersection of social media, political disengagement, and youth voter behavior.

Methodology

This study employed a cross-sectional online survey to examine the relationship between social media messaging and non-voting behavior among Generation Z. The target population consisted of U.S. citizens aged 18 to 28 who were eligible to vote but did not participate in the 2024 U.S. presidential election. Participants were recruited through Prolific, a reputable online research panel, using prescreening filters to identify individuals who met the criteria. A total of 100 respondents completed the survey. Participants were compensated \$1 for their time.

The survey, administered through Qualtrics, was designed to explore the factors that may have influenced Generation Z’s decision not to vote in the 2024 U.S. presidential election. Additionally, the collected data provided demographic information about the participants, including gender, political affiliation, religion, and race/ethnicity (see Table 1 for sample characteristics). Prior to data collection, this study received an exemption determination from the researcher’s Institutional Review Board (IRB).

Table 1: Sample Characteristics

Characteristic	Category	%
Gender	Male	53%
	Female	44%
	Non-Binary/Other Gender	2%
	Prefer Not To Say	1%
Political Affiliation	Democrat	16%
	Republican	17%
	Independent	13%
	No Affiliation	53%
	Other	1%
Religion	Christian	44%
	Muslim	2%
	Atheist	18%
	Agnostic	22%
	Spiritual but not religious	11%
	Other	2%
Race/Ethnicity	White/Caucasian	59%
	Black/African American	18%
	Asian	11%
	Hispanic/Latino	11%
	Middle Eastern/North African	4%
	Mixed/Multiple Ethnicities	2%
	Other	1%

Findings

The leading reasons cited for non-voting behavior are feelings of helplessness and lack of trust in the electoral system. This sentiment is widespread, with many individuals feeling that their personal political

participation holds little to no sway. A substantial 61% of respondents stated that they believe their vote doesn't matter. This sentiment extends to the perceived impact of elections, as 46% of respondents also stated that they believed the outcomes of the election would not affect them. This detachment suggests a perceived disconnect between electoral outcomes and personal well-being.

Beyond personal impact, respondents also expressed significant skepticism towards both the electoral process itself and the overall effectiveness of their vote within it. A notable 57% of respondents believe the electoral system is unfair, and 46% stated that they do not trust the electoral system. These metrics showcase an overarching theme of distrust in democratic institutions prevalent, particularly, in younger generations. This widespread skepticism poses a significant challenge to democratic participation and legitimacy.

While not identified as the primary driver of non-voting, social media played a significant role in reinforcing existing doubts and negative perceptions. Messages specifically emphasizing the "lesser of two evils" resonated with a substantial 59% of respondents, and the "system is rigged" argument resonated with an even larger 71%. These responses indicated that such messages likely resonated strongly with respondents' pre-existing beliefs about political inefficacy. These findings strongly indicate that this messaging did not necessarily introduce new ideas but rather amplified and validated respondents' pre-existing beliefs. This dynamic aligns with the Two-Step Flow of Influence theory, suggesting that social media, rather than being a primary source of new information, amplifies disengagement by validating preexisting distrust.

A representative quote, taken from the open-ended responses, noted: "Voting feels too big to me, in the sense that there are so many policies that I don't understand, and it would take too much work to process all of it and find information online explaining everything." This statement reflects a theme of a lack of digestible information and accessible civic education. It highlights a critical barrier where individuals perceive the political landscape as overwhelming. This also indicates a belief that participating effectively in democracy requires a level of knowledge that many feel they do not have the time, resources, or tools to attain. This perceived gap contributes greatly to voter non-participation in Generation Z.

Discussion

This research emphasizes that voter disengagement is a complex phenomenon rooted in structural and psychological factors. While social media remains a powerful tool for communication, especially among younger generations, its direct influence on the decision not to vote appears limited within this sample. Simply relying on social media campaigns or influencer endorsements is unlikely to significantly shift voter behavior. Instead, outreach strategies should prioritize addressing the deeper, underlying causes of voter disengagement, such as political distrust and lack of education. Programs that rebuild trust through transparent governance, community involvement, and digestible civic education may prove more effective in encouraging participation, especially among underrepresented groups. Policymakers and educators should also consider integrating programs that address systemic barriers and promote political efficacy alongside utilizing social media platforms. Building on these findings, future studies could investigate how different types of social media content, such as misinformation, political satire, or community organizing messages, affect emotional engagement and voting decisions. Additionally, future research would benefit from mixed-method approaches that capture the evolving nature of political engagement over time.

References are available upon request.

SESSION 42.4: TRUST SIGNALS TO BALANCE SHEETS: AI'S NEW MARKETING STACK

Moderators:

Ran Liu

Summary Brief

UNCOVERING THE DRIVERS OF CUSTOMER LIFETIME VALUE: AN AI-BASED EXPLORATORY STUDY WITH BAYESIAN OPTIMIZATION

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Yicheng Pan, University of Wisconsin Madison

PURPOSE OF THE STUDY

Customer Lifetime Value (CLV) is widely recognized as a key performance metric in strategic marketing. It guides segmentation, resource allocation, and retention planning. Traditional Recency–Frequency–Monetary (RFM) models, while foundational, often assume linear and independent effects, overlooking the complexity of real-world customer behavior. This study introduces an AI-enhanced CLV modeling approach that integrates Random Forest regression with Bayesian Optimization to capture non-linear interactions and discover optimal behavioral configurations. The central research questions are: (1) Which behavioral predictor—purchase frequency, behavioral loyalty, or average order value—has the greatest influence on CLV? (2) Can AI models uncover non-linear relationships among these predictors that traditional regression misses? (3) How can Bayesian Optimization identify the optimal combination of predictors to maximize CLV?

METHODOLOGY

The study uses two years of transaction data from a U.S.-based herbal supplement retailer ($n = 1,032$ customers). Three behavioral indicators were calculated: Frequency (number of purchase events over the relationship span), Loyalty Index (proportion of active months to total relationship months), and Average Order Value (total revenue divided by orders). CLV was computed as $\text{Frequency} \times \text{Average Order Value} \times \text{Relationship Length (months)}$. Data preprocessing included outlier removal using the Interquartile Range (IQR) method and Z-score normalization. A baseline Random Forest Regressor was implemented and evaluated with R^2 , MAE, RMSE, and 5-fold cross-validation. Bayesian optimization tuned hyperparameters and analyzed optimal predictor combinations. A multiple linear regression served as a benchmark model.

FINDINGS

The baseline Random Forest achieved $R^2 = 0.812$ (MAE = \$96.73; RMSE = \$128.12). Bayesian Optimization improved performance to $R^2 = 0.834$ (MAE = \$91.46; RMSE = \$120.15). Feature importance analysis revealed that behavioral loyalty was the most influential predictor, followed by purchase frequency and average order value. Non-linear synergy analysis indicated that customers with high loyalty and moderate frequency generated the highest CLV, even at moderate order values. High-frequency but low-loyalty customers exhibited unstable profitability. Decile ranking showed an 84% accuracy in identifying top-value customers. Compared with multiple linear regression ($R^2 = 0.521$), the AI approach captured complex predictor interactions, reduced heteroscedasticity, and improved prediction stability.

RESEARCH LIMITATIONS AND IMPLICATIONS

The results are industry-specific and based solely on behavioral metrics, excluding attitudinal loyalty drivers such as satisfaction or trust. Bayesian Optimization, while effective, is computationally intensive for larger datasets. Future research should test across industries, integrate attitudinal variables, and explore hybrid optimization methods. From a managerial perspective, the findings suggest CRM strategies should emphasize loyalty-centric segmentation rather than focusing only on high-value or high-frequency customers. Loyalty programs should reward consistent engagement over sporadic high-value purchases. AI-enhanced modeling should be integrated into CRM workflows to identify and act on high-value customer patterns.

ORIGINALITY/VALUE OF THE PAPER

This research is among the first to combine Random Forest regression with Bayesian Optimization for CLV prediction and behavioral configuration discovery. It advances both marketing theory—by demonstrating the primacy of behavioral loyalty in driving customer value—and practice, by offering an actionable AI-powered framework for segmentation and retention.

KEYWORDS: *Customer Lifetime Value (CLV); Behavioral Loyalty; Random Forest; Bayesian Optimization; CRM Strategy*

REFERENCES

- Ascarza, E. (2018). Retention futility: Targeting high-risk customers might be ineffective. *Journal of Marketing Research*, 55(1), 80–98. <https://doi.org/10.1509/jmr.14.0610>
- Breiman, L. (2001). Random forests. *Machine Learning*, 45(1), 5–32. <https://doi.org/10.1023/A:1010933404324>
- Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty. *Journal of Marketing*, 65(2), 81–93. <https://doi.org/10.1509/jmkg.65.2.81.18255>
- Dick, A. S., & Basu, K. (1994). Customer loyalty: Toward an integrated conceptual framework. *Journal of the Academy of Marketing Science*, 22(2), 99–113. <https://doi.org/10.1177/0092070394222001>
- Fader, P. S., Hardie, B. G. S., & Lee, K. L. (2005). RFM and CLV: Using iso-value curves for customer base analysis. *Journal of Marketing Research*, 42(4), 415–430. <https://doi.org/10.1509/jmkr.2005.42.4.415>
- Fang, Y., Zhang, Q., & Yang, J. (2023). Predicting customer lifetime value with ensemble machine learning: Evidence from online retail. *Expert Systems with Applications*, 213, 119198. <https://doi.org/10.1016/j.eswa.2022.119198>
- Grover, A., & Wang, L. (2022). Leveraging random forests for customer lifetime value modeling in omnichannel retail. *Journal of Business Research*, 146, 635–648. <https://doi.org/10.1016/j.jbusres.2022.03.052>
- Gupta, S., & Lehmann, D. R. (2003). Customers as assets. *Journal of Interactive Marketing*, 17(1), 9–24. <https://doi.org/10.1002/dir.10045>
- Hughes, A. M. (1994). *Strategic database marketing: The masterplan for starting and managing a profitable, customer-based marketing program*. McGraw-Hill.
- Kumar, V., & George, M. (2007). Measuring and maximizing customer equity: A critical analysis. *Journal of the Academy of Marketing Science*, 35(2), 157–171. <https://doi.org/10.1007/s11747-007-0028-2>
- Kumar, V., & Reinartz, W. (2016). Creating enduring customer value. *Journal of Marketing*, 80(6), 36–68. <https://doi.org/10.1509/jm.15.0414>
- Kumar, V., & Shah, D. (2004). Building and sustaining profitable customer loyalty for the 21st century. *Journal of Retailing*, 80(4), 317–330. <https://doi.org/10.1016/j.jretai.2004.10.007>
- Lundberg, S. M., & Lee, S.-I. (2017). A unified approach to interpreting model predictions. *Advances in Neural Information Processing Systems*, 30, 4765–4774. <https://arxiv.org/abs/1705.07874>
- Molnar, C. (2020). *Interpretable machine learning: A guide for making black box models explainable*. Leanpub. <https://christophm.github.io/interpretable-ml-book/>
- Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(Special Issue), 33–44. <https://doi.org/10.1177/00222429990634s105>
- Reinartz, W., & Kumar, V. (2003). The impact of customer relationship characteristics on profitable lifetime duration. *Journal of Marketing*, 67(1), 77–99. <https://doi.org/10.1509/jmkg.67.1.77.18589>

- Sharma, R., & Saini, V. (2024). SHAP-based interpretation of CLV prediction models: Applications in digital commerce. *Computers in Human Behavior Reports*, 9, 100284. <https://doi.org/10.1016/j.chbr.2023.100284>
- Wang, Z., & Kim, S. (2023). Understanding loyalty as a behavioral determinant of customer lifetime value: A longitudinal analysis. *Journal of Retailing and Consumer Services*, 71, 103274. <https://doi.org/10.1016/j.jretconser.2023.103274>
- Wu, J., Zhao, Y., & Qian, X. (2023). Contrastive multi-view representation learning for robust CLV prediction. *arXiv preprint, arXiv:2306.14400*. <https://arxiv.org/abs/2306.14400>

Summary Brief

Beyond the Buzz: How AI is Reshaping Saudi Marketing Agencies

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Artificial intelligence (AI) is rapidly reshaping the landscape of global marketing practices. While AI adoption is accelerating, the degree to which marketing agencies in Saudi Arabia are embracing these technologies remains insufficiently examined in literature. The unique socio-economic environment and cultural dynamics of Saudi Arabia present both opportunities and barriers to AI integration. This study adopts the Technology Acceptance Model (TAM) as a theoretical framework to evaluate two central determinants of technology adoption—perceived usefulness and perceived ease of use. A mixed-methods approach is employed to obtain a comprehensive understanding of adoption patterns. The research investigates seven key areas on AI's role in shaping the competitive landscape. By addressing these dimensions, the study aims to illuminate how marketing agencies in Saudi Arabia incorporate AI into their operations, the factors influencing adoption decisions, and the implications for both industry practice and policy development in the region.

Introduction

Artificial intelligence (AI) is central to the digital transformation of Saudi Arabia's marketing sector under Vision 2030, stimulating growth, productivity, and innovation across the wider economy (Arab News, 2024; Reactiviti, 2025). In practice, local agencies are deploying AI for personalized content creation, predictive analytics, media optimization, and automated customer engagement. These tools promise faster campaign cycles, deeper consumer insight, and improved return on marketing investment. However, despite visible momentum among large agencies and tech-forward brands, the scale, depth, and quality of AI uptake among small to medium-sized marketing agencies (SMEs) remains poorly documented.

Existing scholarship offers important but partial perspectives. Studies have examined AI-enabled social media marketing in SMEs (Al Jabari et al., 2024) and proposed conceptual frameworks for AI applications in Saudi marketing (Alotaibi, 2024). Yet, empirical evidence on how agencies actually implement AI—tool selection, process redesign, workforce upskilling, data governance—and the practical outcomes achieved—efficiency gains, creative quality, client satisfaction, and competitive differentiation—remains scarce. Moreover, much of the current literature under-theorizes adoption by focusing on descriptive use cases while giving limited attention to established technology acceptance constructs that shape day-to-day decisions in resource-constrained firms.

Background

Building upon the Technology Acceptance Model (TAM), which posits that perceived usefulness and ease of use predict technology adoption (Lederer et al., 2000), this study adapts the model for the Saudi marketing agency context. The Kingdom's AI ecosystem, underpinned by Vision 2030 and institutional support from the Saudi Data & AI Authority, offers conducive conditions for adoption (Oliver Wyman, as cited in Arab News, 2024). Yet, challenges remain: infrastructure gaps, limited skills, and resource constraints may inhibit smaller agencies relative to larger firms. Insights from social media marketing research show that SMEs display varied adoption levels and early positive performance outcomes (Aljabari et al., 2024), underscoring the importance of studying this demographic subsegment.

Key Findings

Initial findings reveal uneven AI adoption among marketing agencies: larger agencies and those with better resources lead in AI integration, while smaller firms show slower uptake due to capability limitations (Aljabari et al., 2024). The benefits—notably improved campaign targeting, operational efficiency, and ROI—are recognized across segments, yet barriers such as data privacy concerns and shortages in technical expertise persist. Agencies express clear intent to scale AI usage, but cite the need for upskilling, strategic roadmapping, and ecosystem partnerships. These findings align with broader regional observations that while AI presents immense potential, supportive infrastructure and talent development remain key enablers (Arab News, 2024).

Expected Themes are:

- AI-Powered Personalization & Engagement
- Adoption of Predictive Analytics & Automation
- Operational Efficiency & ROI Impacts
- Adoption Barriers: Talent, Privacy, Infrastructure
- Strategic Outlook: Training, Partnerships, Scaling

References

- Aljabari, M., Althuwaini, S., Bouguerra, A., Sharabati, A.-A. A., & Allahham, M. (2024). The impact of digital marketing strategies on innovation: The mediating role of AI: A critical study of SMEs in the KSA market. *International Journal of Data and Network Science*, 8(4), 2029–2036.
- Alotaibi, I. S. (2024). A theoretical exploration study of artificial intelligence applications in marketing within Saudi Arabia. *Univ. Tabuk*, 4, 20-38.
- Arab News. (2024, April 26). Saudi Arabia's business landscape witnessing dynamic shift as AI adoption rises. Arab News. <https://arab.news/b6g3e>
- Lederer, A., Maupin, D., Sena, M., & Zhuang, Y. (2000). The technology acceptance model and the World Wide Web. *Decision Support Systems*, 29(3), 269–282.
- Reactiviti. (2025, April 9). How AI is transforming the digital marketing in Saudi Arabia. Reactiviti.

SESSION 42.5: FROM ETHICAL AI TO INFLUENCE OVERLOAD

Moderators:

Mary Harrison

Summary Brief

Preparing Marketing Students for Litigation Support Roles: Forensic Marketing Mock Trials

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Introduction

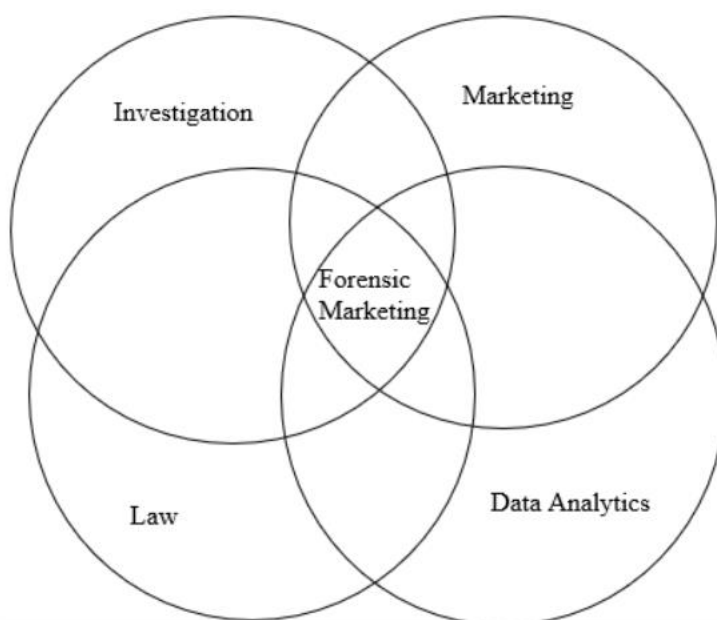
Academicians have been slow to recognize the benefits of litigation support for marketing practitioners. Building on the work of Crumbley and Huang (2023), forensic marketing is defined as gathering evidence that involves marketing 1) non-litigation services and 2) litigation services that may be presented in a civil or criminal court of law as part of a marketing dispute. For both types of litigation services, forensic marketers must understand marketing, investigative and interviewing techniques, law, computer, and communication skills in their roles as a consultant, fact witness, summary witness, or expert witness.

Although the money in business forensics is often in the litigation support area, there is little research about marketing litigation services. Judges are required to assess the reliability of an expert under the Daubert or Frye standards (Daubert, 1993). Attorneys may locate the history of expert witnesses through the Daubert Tracker (dauberttracker.com). A marketing expert witness may have to prepare a written report, testify at a deposition, and testify at the trial (Crumbley & Fenton 2021). This research aims to (1) explain the concept of forensic marketing and (2) introduce and teach students about forensic marketing consulting and expert witnessing through using a marketing mock trial, which can be used in a marketing class as an innovative teaching approach to prepare students for forensic marketing business practices

Background

Forensic marketers need an understanding of marketing, investigative and interviewing techniques, law, and excellent computer skills, as indicated by the four overlapping content areas in Figure 1 Venn diagram. Forensic marketers having different specialties will create different balances of the four sets of knowledge. Superimposed upon the four categories are excellent oral and written communication skills.

Figure 1. Forensic Marketing Knowledge Base



A marketer may be hired by an attorney to gather and interpret facts, prepare analyses, help the attorney interpret evidence, advise about issues and strategies involved in a legal matter, locate other marketers to act as consultants or expert witnesses, and help expert witnesses form their opinions. Marketers acting as consultants will not be asked to testify in a judicial or regulatory proceeding, and their work usually will be protected from disclosure by the attorney work product privilege. A marketer may be retained by an attorney or court as an expert witness to testify in a judicial or administrative proceeding. Marketers retained as expert witnesses are expected to give their opinion in a judicial or administrative proceeding and can expect their work for a lawyer or court to be available to others involved in the litigation.

Conducting Mock Trial in Class

To translate forensic marketing in a marketing classroom, we propose conducting a mock trial as an excellent addition to a marketing course that discusses the legal environment of marketing. This proposed approach is in line with the experiential learning literature, which suggests that mock exercises in class represent as a power approach to facilitate the experiential learning of students. (Thomas et al., 2018; Bobbitt et al., 2000). One of the authors has used mock trials on numerous occasions.

First, students are broken into three to five member teams, and each group prepares for different trial topics. More than one trial topics help to reduce cheating. One example of the trial topics is the case of Coca-Cola v. IRS dispute. The Coca-Cola v. IRS dispute involving transfer pricing that can result in evasion of taxes. In this one case there were 25 expert witnesses and eight of them were marketing experts (See appendixes). We will follow the decision with special attention to the position of Coca-Cola, the IRS, and the U.S. Tax Court. We examine the litigation support and the impact the expert witnesses had on the decision reached by the court. The dispute involves over \$9 billion in reallocation of income which resulted in an additional \$6 billion of additional tax liability for Coca-Cola (U.S. Tax Court, 2020).

For each trial there is both a prosecuting team (criminal) or plaintiff (civil trials), along with a defense team. Both the plaintiff and defense teams will have four or five team members. For example, if you have 24 students there is a need for three dispute topics (24/8). Four-member teams may work better than larger teams. In general, each team needs one or two attorneys and multiple fact and expert witnesses. The expert witness would be a forensic marketer. While the two teams are engaged in the mock trial, the other students can be jurors, bailiff, and investigative reporters. A local lawyer or judge could be the judge during the trial.

If the access to a law school is available, we recommend making arrangement to use their courtroom. In a three-hour class in the evening, two or three trials can be given, or other teams can give their opening and closing statements. Instructors can randomly select the trial to be delivered five minutes before the beginning of the class.

Select marketing topics from current disputes that can be found on Stanford Law School Stockholder Class Action Clearinghouse or Featured List of Class Action Lawsuits (classaction.org) on the internet.

Conclusion

Overall, we suggest that conducting a marketing mock trial can serve as an effective approach for increasing students' awareness and knowledge of forensic marketing. Through this paper, we seek to provide marketing educators guidance on how to incorporate forensic marketing into a course discussion with respect to the legal environment of marketing, a growing niche in the marketing profession.

References

- Bobbitt, L. M., Inks, S. A., Kemp, K. J., & Mayo, D. T. (2000). Integrating marketing courses to enhance team-based experiential learning. *Journal of Marketing Education*, 22(1), 15-24.
- Crumbley, D.L. and Fenton, E.D. 2021: *Forensic and Investigative Accounting*, Bakersfield, Calif.: ABFA.
- Crumbley, D.L. and Huang. 2023. *Forensic Marketing: A Primer of a Hot Niche* Alisha B. Horky, Editor, Society for Marketing Advances 2023 Conference Proceedings, pp. 390-399.
- Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993).
- Finding Expert Witness Daubert Decisions on Lexis,
https://supportcenter.lexisnexis.com/app/answers/answer_view/a_id/1086498/~finding-expert-witness-daubert-decisions-on-lexis#:~:text=Depending%20on%20the%20content%20available%20to%20you%2C%20Expert,Daubert%3A%20Mealey%27s%20Litigation%20Report%20sources%20on%20Lexis%20%C2%AE.
- Thomas, V. L., Magnotta, S. R., Chang, H., & Steffes, E. (2018). Role-playing in a consumption context: An experiential learning activity focused on the consumer decision-making process. *Marketing Education Review*, 28(2), 89-97.
- U.S. Tax Court. 2020. *Coca Cola v. IRS*, 155 T.C. 145 (2020).

Appendix A. *Coca-Cola v. Comm.* Expert Witnesses (2020) Petitioner (Coke)

1. Dr. Susan Athey	Stanford Univ.; economics and technology
2. Dr. Anthony Barbara	Charles River Associates; economics & transfer pricing; firm; former 3 Big 4
3. Dr. Randolph Bucklin	UCLA; marketing & distributions
4. Dr. Michael Cragg	Brattle Group; economics & transfer pricing
5. Dr. Robert Dolan	Harvard Business School; marketing
6. Professor David Franklyn	JD, Golden Gate; international trademark law, Brazilian industrial property
7. Richard Hall	JD, Zenith Global; beverage industry, including NARTD beverages
8. Dr. Dominique Hanssens	UCLA, marketing and marketing science
9. Dr. Kevin Lane Keller	Dartmouth; marketing; advertising & branding
10. Mr. Michael Lasinski	Ankura Consulting Group, CPA, financial forensics; intellectual property licensing and negotiation
11. Dr. Timothy Luehrman	Professor of Finance; Harvard Business; financial forensics
12. Mr. Keith Reams	Deloitte Tax; chemical engineering & economics; economics & transferring pricing
13. Dr. Sanjay Unni	Berkeley Research Group; economics; SMU; economics, financial economics, transfer-pricing

14. Mr. Robert Wentland	CPA, Ankura Consulting Group; financial statement analysis and forensic accounting
15. Dr. Robert Willig	Princeton University; economics & public affairs; microeconomics

Appendix B. *Coco-Cola v. Comm.* Expert Witnesses (2020) Respondent (IRS)

1. Dr. Kusum Ailawadi	Dartmouth; marketing expert
2. Dr. Brian Becker	Precision Economics; economics & transfer pricing
3. Jorge Luis Contreras	JD, U. of Utah Law School; Contreras Legal Strategy; intellectual property, law property transactions
4. Dr. Paul Farris	Harvard University; Landmark Communication, Professor at Va. School of Business; marketing
5. Mr. Stuart Harden	CPA, CFF, Hemming Morse; financial statement analysis and forensic accounting
6. Dr. Andrew Metrick	Forensic/Management Yale U.; economics degree from Harvard; finance & economics
7. Dr. T. Scott Newlon	Horst Frisch; Princeton; KPMG; Dept. of Treasury; wrote 1994 transfer pricing regulations; economics & transfer pricing
8. Dr. David J. Reibstein	Wharton School of Business; BODs of Amer. Marketing Assoc.; Purdue U; expert in marketing
9. Mr. Jean-Marc Thevenin	Ramaco Development; worked in food & beverage industry for 30 yrs., operational mgt. of branded foods and beverages
10. Dr. Juliana L. B. Viegas	Brazilian attorney; JD and PhD from University of Sao Paulo School of Law; filed more than 2,000 trademark application; Brazilian trademark law & practice

Summary Brief

“I’ve had enough” of Taylor Swift Attention at NFL Games: Product Co-Optation and Target Audience Dissonance in New Market Development

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Amy Watson, Valdosta State University, USA

Jen Riley, Vanderbilt University, USA

Morgan M. Bryant, Saint Joseph’s University, USA

Brands fortunate enough to have loyal fan bases sometimes spark backlash when they pivot or attempt to broaden their appeal to new audiences, especially if that outreach feels inauthentic or at odds with the existing brand identity or identity of its consumers. This research aims to identify the key variables that brand managers must evaluate and manage when considering expansion to new markets. Results of a national Qualtrics survey will be used to test the presented theoretical model.

Introduction

After the confirmation of the relationship between Taylor Swift and Travis Kelce (Kansas City Chief’s tight end) and her presence at his games in 2023, the ‘Taylor Swift Effect’ was very real for the NFL and football fans that season. The NFL experienced its highest regular-season viewership among women since tracking began. Specifically, there was:

- A 53% increase in female viewership among those aged 12-17.
- A 34% rise in viewership among those over 35.
- A 24% increase in the 18-24 demographic

Additionally, it is reported that the league’s brand value rose by more than \$331.5 million in just four months (Acton 2024). However, not all fans were happy with the disruption that her presence caused. Ticket prices soared at games she was suspected to attend, and broadcasts were modified to include Taylor Swift songs/references/coverage and information for Swifties who did not know the basics of the game. This left many long-time fans dissatisfied with the changes implemented for this new, and somewhat unexpected, target audience to a product they had loyally consumed for years. Because the NFL had been gradually increasing their outreach to female fans for years, the embrace of this new audience was not a complete aberration. In spite of the lack of product knowledge (i.e. football knowledge) and differing consumption motivations/goals of this new audience, there was simply too much opportunity for market expansion and increased revenue for the NFL, broadcast networks, and sponsoring brands not to capitalize on it. This created a tension between brand loyalists and the new target audience, who were perceived to have little in common with one another. Despite the tension, while there were grumblings and social media rants about the co-optation of the game by Swifties, there were no widespread boycotts or brand defections from loyalists.

Contrast that with the backlash faced by Bud Light when they partnered with transgender influencer Dylan Mulvaney in April 2023. The partnership ignited a wave of boycotts from many of its core customers, particularly “fratty” male drinkers who felt the move was politically charged and disconnected from the brand’s long-standing identity. Social media calls for a boycott quickly translated into a measurable decline in sales – by some estimates, Bud Light’s U.S. retail sales dropped over 25% in the weeks following the promotion. They lost \$1.4 billion in sales, \$27 billion in value, and saw their U.S. market share reduced by half (Park 2024). Major retailers responded by reducing Bud Light’s shelf space, reallocating prime cooler spots to rival brands. The brand, which had held the title of America’s best-selling beer for over two decades, lost its #1 position to Modelo Especial by mid-2023, and now sits in third. For many in Bud Light’s traditional male customer base, the campaign was perceived as a betrayal of the brand’s “blue-collar, all-American” image, leaving them feeling alienated and ignored in favor of a new audience that didn’t align with their perception of the brand or themselves (Park 2024).

The difference in outcomes for these two scenarios is the driving force of this project. Specifically, this paper addresses the following research questions:

1. What role does brand loyalty and brand-self connection play in the likelihood of current brand consumers to negatively react to new audience development?
2. Does dissonance between current brand users and the new target audience increase the likelihood of negative reactivity?
3. How does the bargaining power of buyers impact current market metrics during new target audience development?

The goal of this research is to create a theoretically-grounded Market Development Risk Assessment Tool that practitioners can use to evaluate the potential impact of brand expansion and activism decisions.

Background

The concepts of product co-optation and target audience dissonance have received little attention in the marketing literature. This paper fills the gap by building on brand loyalty, brand crisis, and self-brand connection literature, combined with the buyer's bargaining power element from Porter's 5 Forces, to address the multiple-audience dilemma (Fleming et al 1990). While the co-optation of the NFL by Taylor Swift and her fans is a highly visible and discussed example, the phenomenon happens with relative frequency and could provide theoretical explanations for a wider variety of consumer behaviors (e.g. the migration of young people from Facebook/Instagram as older demographics adopted the platforms).

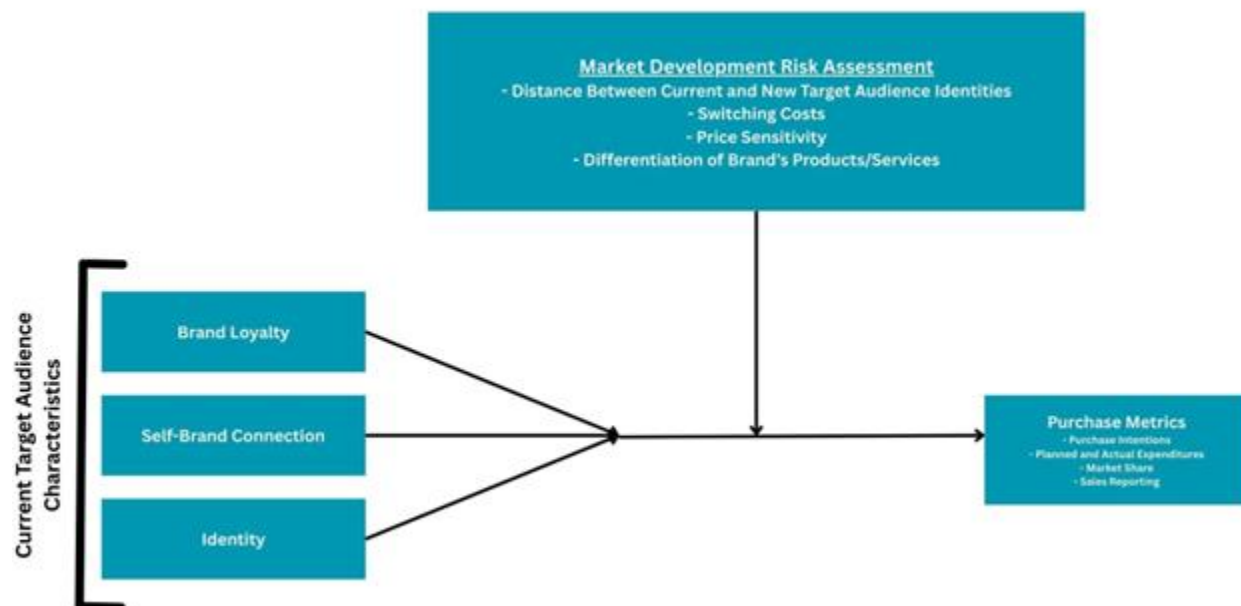
The multiple audience dilemma, how a communicator maintains different impressions for audiences with conflicting expectations, shows that senders embed mixed, even covert, messages to satisfy divergent groups without losing credibility (Fleming et al. 1990; Fleming & Darley 1991). Recent work demonstrates how people adapt signals in heterogeneous networks: when audiences are ideologically mixed, communicators shift toward subtler, "covert" identity signals to minimize pushback or resistance from any one side (van der Does et al. 2022). In digital contexts, individuals often self-present to the strongest or most consequential audience segment rather than optimize for all, highlighting a pragmatic resolution to potential audience conflict (Marder et al. 2016). At the organizational level, evaluations from one audience can spill over to others, intertwining ability and identity judgments and amplifying reputational risks when messaging targets multiple constituencies simultaneously (Fini, Jourdan, & Perkmann 2018). While not examined in a branding context, the current literature demonstrates that multi-audience communication pushes communicators toward strategic selectivity, via covert cues, prioritization of key segments, and careful sequencing, because signals interpreted by one group are rarely invisible to the rest. These findings are in direct contradiction to the recent approaches taken by brands in the given examples where the communication was overt rather than covert, and simultaneous as opposed to carefully sequenced. This study adapts and extends the concept from person-person communication to brand-audience communication.

The Self-Brand Connection construct (Escalas 2004) is a widely used tool for assessing the depth of consumer-brand relationships, capturing how closely consumers identify with and see a brand as part of their self-concept. Research shows that strong self-brand connections foster brand self-congruence, emotional attachment, and engagement in brand communities, which in turn promote loyalty, positive associations, and willingness to pay premium prices (Shimul 2022). Consumers with high brand identification are generally more resistant to negative information and less likely to switch brands, as their relationship with the brand extends beyond functional benefits to symbolic and identity-based value. This identity alignment can be cultivated through consistent brand messaging, community-building initiatives, and experiences that reinforce the brand as an extension of the consumer's self-image.

Consumer-Brand Identification (CBI) plays a particularly critical role during times of crisis. Studies using the Self-Brand Connection Scale have found that high CBI can buffer the negative impact of scandals, increase acceptance of corporate responses, and sustain trust, purchase intentions, and positive word-of-mouth (Ma 2023). Strong CBI also enhances the effectiveness of crisis communication, especially when a brand's core attributes remain unthreatened, by fostering greater sympathy and reducing negative emotional reactions. However, when a crisis is perceived as undermining fundamental brand values, even loyal consumers with high CBI may disengage or switch to competitors. This demonstrates that while CBI is a powerful driver of loyalty and resilience, it depends on a brand's ability to preserve the integrity of its core identity in the eyes of its customers.

While powerful, branding does not exist in a vacuum devoid of market structure and realities. According to Porter's Five Forces, the bargaining power of buyers element reflects how significantly customers can influence a firm's pricing, quality, and terms. This force intensifies when buyers are large relative to sellers, purchase in high volumes, have easy access to competitive alternatives, and face low switching costs (Porter 2008). While this model is most commonly applied to business-to-business relationships and supply chain evaluation, the components of buyer power are relevant when considering the likelihood of a consumer boycott in response to product co-optation and new target audience dissonance. Regardless of dissatisfaction, if switching costs are perceived to be too high, or consumers deem there are no suitable product alternatives, they are less likely to switch products or discontinue purchasing the brand.

These constructs form the theoretical basis for the model that will be tested.



Methodology

National survey data was collected via Qualtrics. Respondents were screened for NFL and/or Taylor Swift fandom. The survey instrument was designed using adapted Brand Loyalty (Yoo & Donthu 2001; Delgado-Ballester & Munuera-Alemán 2001) and Self-Brand Connection (Escalas 2004) scales. Identity was measured via semantic differential scales with endpoints for 21 variables (e.g. conservative/progressive, disagreeable/agreeable, insecure/confident, etc). The key elements of buyer power were measured using survey items about perceived product differentiation, multidimensional switching costs (Burnham, Frels, & Mahajan 2003), price sensitivity, and purchase decision involvement (Mittal 1989). For purchase metrics, respondents were asked to estimate actual expenditures related to their fandom within the past 12 months and to estimate future purchase intentions and their value for the next 12 months. Reported viewership numbers, ticket/album/merchandise sales and market share data will be incorporated into the statistical model.

Data was collected in late summer 2025 and will be analyzed and included in the conference presentation, if accepted.

References

Acton, K. (2024, February 5). The NFL's "mastermind" decision to lean into the Taylor Swift effect. IDX.INC.
<https://www.idx.inc/insights/nfls-mastermind-decision-lean-taylor-swift->

effect#:~:text=With%20Swift's%20assistance%2C%20the%20NFL,women%20aged%2035%20and%20above.

- Burnham, T. A., Frels, J. K., & Mahajan, V. (2003). Consumer switching costs: A typology, antecedents, and consequences. *Journal of the Academy of Marketing Science*, 31(2), 109-126.
- Delgado-Ballester, E., & Munuera-Alemán, J. L. (2001). Brand trust in the context of consumer loyalty. *European Journal of Marketing*, 35(11/12), 1238-1258
- Escalas, J. E. (2004). Narrative processing: Building consumer connections to brands. *Journal of Consumer Psychology*, 14(1-2), 168-180. https://doi.org/10.1207/s15327663jcp1401&2_19
- Fini, R., Jourdan, J., & Perkmann, M. (2018). Social valuation across multiple audiences: The interplay between ability and identity judgments. *Academy of Management Journal*, 61(6), 2230–2264. <https://doi.org/10.5465/amj.2016.0661>
- Fleming, J. H., & Darley, J. M. (1991). Mixed messages: The multiple audience problem and strategic communication. *Social Cognition*, 9(1), 25–46. <https://doi.org/10.1521/soco.1991.9.1.25>
- Fleming, J. H., Darley, J. M., Hilton, J. L., & Kojetin, B. A. (1990). Multiple audience problem: A strategic communication perspective on social perception. *Journal of Personality and Social Psychology*, 58(4), 593–609. <https://doi.org/10.1037/0022-3514.58.4.593>
- Ma, L. (2023). How the interplay of consumer-brand identification and crises influences the effectiveness of corporate response strategies. *International Journal of Business Communication*, 60(1), 84-104. <https://doi.org/10.1177/2329488419898222>
- Marder, B., Joinson, A., Shankar, A., & Thirlaway, K. (2016). Self-presentation to the strongest audience rather than multiple audiences on social network sites. *Computers in Human Behavior*, 61(August), 56-62. <https://doi.org/10.1016/j.chb.2016.03.005>
- Mittal, B. (1989). Measuring purchase-decision involvement. *Psychology & Marketing*, 6(2), 147-162.
- Park, A. (2024, July 23). Bud Light boycott effects endure – brand drops to third. *Forbes*. <https://www.forbes.com/sites/aliciapark/2024/07/18/bud-light-boycott-effects-endure-brand-drops-to-third/>
- Porter, M. (2008). The five competitive forces that shape strategy. *Harvard Business Review*, (January). <https://hbr.org/2008/01/the-five-competitive-forces-that-shape-strategy>
- Shimul, A. S. (2022). Brand attachment: a review and future research. *Journal of Brand Management*, (29), 400-419. <https://doi.org/10.1057/s41262-022-00279-5>
- van der Does, T., Galesic, M., Dunivin, Z. O., & Smaldino, P. E. (2022). Strategic identity signaling in heterogeneous networks. *Proceedings of the National Academy of Sciences*, 119(10), e2117898119. <https://doi.org/10.1073/pnas.2117898119>
- Yoo, B., & Donthu, N. (2001). Developing and validating a multidimensional consumer-based brand equity scale. *Journal of Business Research*, 52(1), 1-14.

Full Paper

Corporate Digital Responsibility and the SDGs: Toward a Framework for Ethical AI and Market Emancipation

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As artificial intelligence and digital technologies increasingly mediate corporate-consumer interactions, firms face heightened expectations to align innovation with societal well-being. Corporate Digital Responsibility (CDR) has emerged as a framework to address the ethical, social, and environmental consequences of digital transformation. Many companies have embraced the United Nations Sustainable Development Goals (SDGs) as a foundation for these digital responsibility efforts. However, despite these commitments, many companies struggle to meaningfully integrate these responsibilities into strategic marketing and governance. This paper examines how Fortune 100 companies engage with the UN SDGs across purpose statements, annual reports, and sustainability disclosures. Using alignment theory, we examine SDG engagement patterns to reveal insights about corporate approaches to digital responsibility. Through text analysis, we uncover patterns of symbolic adoption and selective reporting, particularly avoidance of politically charged SDGs such as climate action. From a posthumanist perspective, these SDG patterns suggest corporate reluctance to confront complex human-technology relationships. These findings reveal a gap between corporate sustainability rhetoric and the digital responsibility needed for genuine consumer empowerment in an AI-driven marketplace. Our analysis offers insights for marketers to advance responsible AI development while promoting genuine inclusivity, transparency, and accountability.

Introduction

The rapid proliferation of artificial intelligence (AI) and related digital technologies is fundamentally reshaping the strategies and structures of modern organizations (Fountaine, McCarthy, & Saleh, 2019). AI-driven tools are increasingly embedded in decision-making processes (Fildes, Ma, & Kolassa, 2022), customer interactions (Adam, Wessel, & Benlian, 2021), and product ecosystems (Chong, Ch'ng, Liu, & Li, 2017). These AI-driven tools are promising enhanced efficiency, personalization, and predictive accuracy (Nweke & Adelusi 2025). However, alongside these opportunities are profound societal risks, including algorithmic bias, digital exclusion, and the erosion of consumer agency. These challenges call for new frameworks of accountability and responsibility (Airoidi & Rokka, 2022; André et al., 2018; Aragani, Anumolu, & Selvakumar, 2025; Fowler et al., 2024; Zimmerman et al., 2024).

Corporate digital responsibility (CDR) has emerged as a conceptual and practical extension of corporate social responsibility (CSR), encompassing the ethical, legal, and social obligations firms face in the digital age. CDR emphasizes not only compliance with digital governance standards but also a proactive stance on issues such as data transparency, responsible AI, and the equitable distribution of digital innovation (Kunz & Wirtz, 2024; Ferrell & Ferrell, 2021). Concerns about consumer agency and market emancipation, longstanding macromarketing priorities, have resurfaced in light of increasingly posthuman marketing environments in which algorithmic systems mediate access and choice (Danaher, 2019; Puntoni, 2024).

We analyze how Fortune 100 companies engage with SDGs across purpose statements, annual reports, and sustainability disclosures as indicators of corporate approaches to digital responsibility. The UN SDGs provide a particularly apt framework for evaluating CDR because digital technologies increasingly mediate progress on virtually all 17 goals, from AI's role in healthcare delivery (SDG 3) to algorithmic bias impact on inequality (SDG 10) to data center energy consumption's effect on climate action (SDG 13). Adopted by all UN member states in 2015, the SDGs offer a comprehensive framework for addressing global challenges related to poverty, inequality, climate change, and inclusive economic growth (United Nations General Assembly, 2015). While the SDGs have been widely embraced by governments and civil society, corporate engagement remains inconsistent (Heras-Saizarbitoria, Urbieto, & Boiral, 2022; Van Zanten & Van Tulder, 2018). Because of their multi-dimensional,

comprehensive structure (United Nations General Assembly, 2015), the SDGs offer a useful benchmark for gauging whether digital innovation aligns with global sustainability and equity objectives. By analyzing SDG engagement patterns across different corporate communications, we can assess the consistency of corporate sustainability commitments and explore what these patterns suggest about broader approaches to digital responsibility.

CDR aligns with global sustainability ambitions, particularly the UN SDGs, which call for inclusive, responsible, and forward-looking business practices. Table 1 provides an overview of representative academic contributions to the emerging field of Corporate Digital Responsibility (CDR), highlighting the conceptual foundations and methodological approaches that inform this study.

Table 1: Literature on Corporate Digital Responsibility: Frameworks and Methods

Authors	Focus of Study	Method	Key Contribution to CDR
Basu, Jha, Ooi, & Cham (2025)	Operationalization of CDR in strategy	Empirical	Examines how firms incorporate CDR principles into strategic decision-making
Carl & Hinz (2024)	CDR activities in Information Systems	Literature review	Identifies ten CDR dimensions and firm-level actions based on a comprehensive IS literature review
Ferrell & Ferrell (2021)	AI, ethics, and marketing responsibilities	Conceptual	Identifies AI's role in redefining corporate responsibility and ethical obligations
Hartley, Kunz, & Tarbit (2024)	Risk-benefit assessment of CDR	Conceptual	Introduces the CDR Calculus as a framework to evaluate risks and benefits of digital decisions
Herden et al. (2021)	New corporate responsibilities in the digital era	Conceptual	Introduces foundational definition of Corporate Digital Responsibility and outlines its relevance for digital transformation and corporate ethics
Kunz & Wirtz (2024)	Corporate Digital Responsibility in interactive marketing	Conceptual/Theoretical	Established CDR framework across four responsibility dimensions (economic, legal, ethical, discretionary)
Liyanarachchi, Deshpande, & Weaven (2021)	Market-oriented digital responsibility (MODR) in the banking sector	Conceptual with industry application	Introduces the MODR framework and Data Vulnerability Growth Model (DVGM), emphasizing consumer segmentation and co-creation strategies in addressing digital vulnerability
Lobschat, Mueller, Eggers et al. (2021)	Defining CDR; organizational culture and digital ethics	Conceptual	Established a foundational definition of CDR and emphasized the role of organizational culture in shaping digital norms
Wirtz, Kunz, Hartley, & Tarbit (2023)	CDR in AI-driven service contexts	Conceptual with managerial implications	Analyzes CDR in customer service environments, focusing on AI and privacy practices

Yet despite growing rhetoric, a gap persists between stated commitments and concrete implementation. Firms may adopt SDG-related language selectively, emphasizing goals that align with their business models while avoiding politically charged goals, or sidestep ethical challenges posed by digital systems. These patterns raise important questions about strategic coherence and the authentic integration of ethical principles into corporate narratives, particularly in relation to digital responsibility. Building on the empirical foundation gained from assessing corporate statements vis-a-vis the SDGs, a proposed second study examines how digital transformation, and particularly the rise of AI, intersects with corporate sustainability commitments and digital ethics.

To systematically examine these gaps between corporate rhetoric and authentic digital responsibility, this study investigates the intersection of CDR, SDG alignment, and AI-driven corporate transformation through the lens of alignment theory. We ask: (1) To what extent do corporate purpose statements and public disclosures reflect meaningful engagement with the SDGs? (2) What do SDG engagement patterns reveal about corporate approaches to digital ethics and responsibility? (3) What implications do these patterns hold for consumer agency and market emancipation in the digital era? Through normative framing and empirical analysis, this study aims to advance a macromarketing agenda that bridges ethical innovation and social good.

Theoretical Background

Corporate Digital Responsibility and the ESG-SDG Connection

Corporate Digital Responsibility (CDR) is increasingly recognized as a vital evolution of Corporate Social Responsibility (CSR), adapting traditional business ethics to the realities of digital transformation. As digital technologies permeate nearly every facet of organizational operations, from data collection and AI deployment to supply chain management and customer engagement, firms face heightened scrutiny regarding the ethical and societal consequences of their digital practices. Building on Carroll's (1991) CSR pyramid, CDR encompasses economic, legal, ethical, and discretionary responsibilities, put into context for a digital era.

At the economic level, firms must innovate to remain competitive within increasingly digitized markets (Knudsen et al., 2021). Legally, they are bound by regulations such as the General Data Protection Regulation (GDPR) in the EU, yet the rapid pace of technological change often outstrips formal legal structures. Ethically, companies are called to ensure fairness, transparency, and non-discrimination in digital decision-making, particularly as AI systems scale. At the discretionary level, firms can demonstrate leadership by voluntarily adopting practices that enhance digital inclusion, sustainability, and social impact, actions that closely align with the United Nations Sustainable Development Goals (SDGs).

The intersection of CDR and SDGs becomes particularly revealing when examining how companies discuss digital technologies' role in advancing or hindering sustainable development. Authentic CDR requires explicit recognition that AI and digital systems can impact multiple SDG outcomes: from exacerbating inequality (SDG 10) to enabling inclusive education (SDG 4) to affecting climate action (SDG 13) through energy consumption. Companies demonstrating mature CDR should therefore articulate clear connections between their digital practices and SDG impacts.

However, the promise of CDR has emerged amid growing skepticism of Environmental, Social, and Governance (ESG) frameworks. In the face of regulatory backlash, politicization, and accusations of greenwashing, many corporations have become hesitant to spotlight ESG commitments (Ioannou, 2025). Consequently, the SDGs have been positioned by some firms as a less controversial, more globally endorsed alternative that still affirms a social contract. Yet, as this paper explores, SDG engagement is often symbolic and uneven, raising questions about the integrity and depth of digital responsibility initiatives.

Marketing plays a critical role in this landscape, acting as the bridge between corporate strategy and societal expectation. Marketers not only communicate purpose but also shape how firms define, report, and evolve their digital ethics practices. As such, CDR becomes both a strategic imperative and a moral opportunity, which can be navigated in tandem with the SDG agenda.

Market Emancipation, Consumer Agency, and AI Ethics

The transformative power of artificial intelligence has brought about a reconfiguration of consumer roles and identities, raising fundamental questions about autonomy, dignity, and agency (Joseph, 2025). In algorithmic consumer cultures, where decision-making is increasingly shaped by predictive models, personalization engines, and data-driven nudges, the traditional view of the empowered, rational consumer is being challenged (Leung, 2025; Sandua, 2025). This evolution demands renewed attention from macromarketing scholars, particularly as the boundaries between human and machine blur (Krafft, Sajtos, & Haenlein, 2020).

The posthumanist lens reveals how corporate digital responsibility claims must be evaluated not just for their stated commitments, but for how they reconceptualize the consumer-technology relationship itself. As Bauman (2001) and Danaher (2019) suggest, AI systems risk creating a "crisis of moral patency" where consumers become

passive recipients of algorithmic decisions. This shift challenges traditional marketing assumptions about autonomous, rational consumers and demands that CDR frameworks explicitly address how digital systems either preserve or erode human agency. Corporate communications about AI and digital responsibility thus become sites where new forms of human-technology entanglement are negotiated. When companies claim to prioritize “responsible AI” or “digital inclusion,” they are implicitly defining what it means to be human in an algorithmic marketplace. A posthumanist analysis asks: Do these CDR narratives position consumers as empowered co-creators with AI systems, or as vulnerable subjects requiring corporate protection? The answer has profound implications for market emancipation.

Digital technologies may exacerbate vulnerabilities, especially among marginalized or digitally excluded groups. Issues of biased AI, surveillance capitalism, and data exploitation reflect deeper asymmetries in access, literacy, and power. As Thyroff et al. (2023) and Zimmerman et al. (2024) argue, the emotional and psychological impacts of these dynamics can manifest in digital anxiety, distrust, and behavioral withdrawal.

Macromarketing, with its systems-level orientation and normative foundations, is uniquely positioned to address these challenges. It offers a platform for examining how corporate digital strategies can either constrain or expand consumer agency. Responsible AI practices that prioritize inclusivity, transparency, and human-centric design must be integrated into broader marketing ethics discussions. Consumer emancipation demands structural changes that give consumers influence over platform rules, data practices, and algorithmic decision-making, not just expanded shopping options.

Alignment Theory and Strategic Fit

Originally developed within strategic management literature, alignment theory argues that organizational performance improves when a firm’s strategy, structure, culture, and capabilities are congruent with both internal objectives and external market conditions (Chorn, 1991). In the context of CDR and SDG integration, alignment theory provides a lens for examining how firms align their digital ethics initiatives across corporate purpose, operational practices, and stakeholder communications.

For marketing leaders and strategy professionals, achieving alignment means more than articulating a mission statement, it involves embedding ethical AI and digital responsibility into the core identity and value propositions of the firm. This integration must also extend to tangible actions, including how companies report on SDG progress, design user-facing technologies, and assess the societal impact of their AI-driven products and services. Misalignment, by contrast, often manifests in reputational risk, stakeholder mistrust, and inconsistent messaging, especially when firms claim ethical commitments without demonstrating corresponding behaviors.

Research has shown that alignment between a company’s purpose and its performance metrics can enhance credibility, improve employee engagement, and build long-term trust with consumers (Al-Surmi et al., 2020; Gulati & Wohlgezogen, 2023). In the digital context, where public scrutiny is high and ethical missteps can quickly escalate, alignment is both a strategic necessity and a normative benchmark. Firms that align their CDR strategies with the SDGs, both in content and communication, are better positioned to navigate complexity and deliver meaningful, measurable outcomes for stakeholders.

Study 1: What Do the Fortune 100’s Public Statements Reveal About SDG Commitment?

Method

This study employed a qualitative content analysis of Fortune 100 companies’ publicly available communications to examine the degree to which SDG-related themes are embedded within strategic documents. Table 2 lists the industry sectors represented in the Fortune 100. Following recommendations by Berger et al. (2020) on using text analysis for marketing scholarship, we collected three categories of corporate content from each company’s website: (1) purpose or mission statements, (2) annual reports (10-K filings), and (3) standalone ESG or sustainability reports from the fiscal year 2023.

Table 2: Sample Composition

Sector	%
Aerospace & Defense	3

Apparel	1
Automotive	1
Aviation	3
Chemicals	1
Energy	10
Financial	18
Food & Drug Stores	4
Food, Beverages & Tobacco	5
Health Care	16
Industrials	5
Media	1
Motor Vehicles & Parts	2
Petroleum	1
Retail	10
Technology	11
Telecommunication	5
Transportation	2
Wholesaler	1

First, we extracted purpose statements either from the company’s “About Us” section or from Part 1, Item 1 of their 10-K annual filing. These statements were coded for references to social or environmental goals and then cross-referenced with the 17 SDGs to determine thematic alignment. Next, we analyzed the full text of each company’s annual report to identify any explicit mentions of the UN SDGs or related terminology (e.g., sustainable development, responsibility, climate action). Finally, we conducted a focused analysis of the companies’ most recent ESG or sustainability reports to assess the extent and specificity of SDG integration. This included identifying whether the company claimed to address particular SDGs, how many were mentioned, and whether supporting actions or metrics were provided.

Each document was coded by three independent reviewers using a coding scheme based on UN SDG definitions and targets. Both explicit (direct mentions of SDG goals or numbers) and implicit (language suggestive of SDG themes) references were recorded. Disagreements in coding were resolved through consensus meetings. In total, the dataset included 97 complete purpose statements, 100 annual reports, and 89 ESG/sustainability reports. We recorded the number and identity of SDGs referenced per firm, as well as patterns of alignment or avoidance, especially regarding politically contentious SDGs such as Climate Action (SDG 13) and Life Below Water (SDG 14). This triangulated approach across purpose statements, annual reports, and ESG disclosures enables assessment of both the consistency and substance of corporate SDG engagement.

Results

Our analysis revealed several notable patterns in the alignment between corporate communications and the United Nations Sustainable Development Goals (SDGs). First, we found that all 97 analyzed purpose statements contained at least one implicit reference to an SDG, most commonly to SDG 9 (Industry, Innovation, and Infrastructure) and SDG 3 (Good Health and Well-being). On average, purpose statements are aligned with 1.7 SDGs per company. For example, Tesla’s purpose statement, “to accelerate the world’s transition to sustainable

energy through increasingly affordable electric vehicles” embeds three SDGs: Affordable and Clean Energy (SDG 7), Industry Innovation (SDG 9), and Responsible Consumption (SDG 12).

Only 11 out of 100 companies (11%) explicitly mentioned the SDGs in their 2023 annual reports, and references were typically limited to general statements of support rather than detailed reporting. Most mentions occurred in sections discussing corporate citizenship, risk mitigation, or sustainability commitments, but lacked specificity or clear alignment with particular SDG targets.

ESG reports showed much higher explicit SDG engagement: 67 of 89 companies that published standalone ESG or sustainability reports (75%) directly referenced the SDGs by name, compared to the 11% of annual reports. Six companies claimed to address all 17 SDGs in their ESG reporting, raising questions about authenticity versus aspiration. There was substantial variability in the depth and clarity of reporting. While some companies included detailed metrics and action plans tied to specific SDGs, others simply listed the goals they aligned with, without elaboration. Most strikingly, companies systematically avoided politically charged SDGs. Not a single Fortune 100 purpose statement referenced Climate Action (SDG 13) or Life Below Water (SDG 14), a glaring omission given the global urgency of environmental challenges.

A small subset of companies demonstrated strong internal alignment across purpose statements, annual reports, and ESG reports. These firms consistently communicated a coherent narrative around their sustainability and corporate purpose. Such alignment correlated with more detailed reporting and a greater number of SDGs addressed, suggesting that internal consistency may signal greater commitment to substantive, not merely symbolic, engagement. These findings highlight the disjunction between aspirational statements and verifiable action. They also reveal the continued marginalization of certain SDGs in corporate discourse, raising important questions about the integrity and strategic coherence of corporate sustainability efforts.

Toward Posthumanist Corporate Digital Responsibility

These patterns of avoidance and inconsistency take on additional significance when viewed through a posthumanist lens. The avoidance of politically contentious SDGs like Climate Action (SDG 13) becomes particularly revealing: it suggests corporate reluctance to engage with the messy, contested nature of human-environment-technology relationships that climate action entails. This pattern raises broader questions about how companies might similarly avoid contested aspects of AI and digital responsibility.

These SDG patterns, particularly the avoidance of contested issues, raise questions about whether most Fortune 100 companies are grappling with the fundamental posthumanist challenge that AI presents. Specifically, how can companies maintain consumer agency when decision-making increasingly involves human-AI networks rather than individual human choice? The gap reflects deeper uncertainty about what consumer empowerment means when consumers are entangled with algorithmic systems. A truly posthumanist approach to CDR would require companies to move beyond protecting consumers from AI toward enabling consumers to actively participate in shaping algorithmic systems. Based on our analysis of SDG patterns, current corporate sustainability approaches may inadvertently reinforce rather than challenge existing power asymmetries between corporations and consumers, limiting rather than expanding market emancipation possibilities.

Study 2 (Proposed): Longitudinal Analysis of CDR Evolution (2023-2024)

While Study 1 revealed important patterns in corporate sustainability engagement, it used SDG alignment as an indirect indicator of digital responsibility maturity. Study 2 addresses this limitation by directly analyzing CDR-specific language and consumer positioning. This approach will reveal whether the SDG patterns we observed in Study 1, such as selective engagement and avoidance of contested issues, translate into similar patterns in explicit discussions of AI, digital ethics, and consumer agency.

Our proposed longitudinal analysis extends the 2023 Fortune 100 analysis to include 2024 corporate communications, tracking how companies have integrated CDR language, AI governance frameworks, and digital responsibility commitments over a critical year marked by increased AI regulation (including the EU AI Act), growing public scrutiny of algorithmic decision-making, and continued ESG backlash in the United States.

Using an expanded coding framework, we will analyze how corporate CDR discourse constructs human-AI relationships and consumer agency. Our analysis will capture both technical CDR terminology (digital ethics,

responsible AI, algorithmic fairness, data privacy protections, digital inclusion initiatives, and technology impact assessments) and posthumanist positioning of consumers as: (1) passive recipients of algorithmic decisions, (2) protected subjects requiring corporate oversight, or (3) active co-creators within human-AI networks. We will also examine corporate discussion of consumer consent, algorithmic transparency, and mechanisms for contesting AI-driven decisions.

This comprehensive approach will reveal whether emerging CDR commitments represent authentic posthumanist engagement with market emancipation or merely sophisticated forms of algorithmic stewardship disguised as social responsibility. This will provide critical evidence of how corporate sustainability narratives are evolving to either constrain or enable consumer agency in an increasingly algorithmic marketplace.

Discussion

Our findings underscore the disjunction between commitment and actionable integration of the SDGs in corporate sustainability communications. While ESG and sustainability reports increasingly reference the SDGs, this language often appears symbolic, lacking clear metrics, accountability mechanisms, or strategic depth. Annual reports and purpose statements, by contrast, lag even further behind, suggesting that sustainability values remain peripheral to core business strategy for many firms.

This pattern raises concerns about the authenticity of digital ethics efforts, particularly in an era of growing AI deployment and public scrutiny. Selective SDG engagement, especially the marginalization of politically charged goals like Climate Action (SDG 13), may signal an attempt to avoid reputational or regulatory risk while still maintaining the appearance of social responsibility. These findings lend support to macromarketing critiques of performative CSR and underscore the need for greater transparency and coherence in how companies articulate and enact their digital responsibility agendas.

Marketing scholars and practitioners are uniquely positioned to bridge these gaps. As curators of corporate purpose and consumer narratives, marketers play a critical role in translating broad ethical commitments into tangible actions that resonate with diverse stakeholders. This includes advocating for alignment between internal values and external messaging, integrating digital inclusion and AI ethics into brand strategies, and resisting the temptation to treat SDG language as a reputational shield rather than a strategic compass.

To deepen our understanding of how CDR commitments evolve over time, we propose a longitudinal study of Fortune 100 companies' 2024 corporate communications. This proposed study will offer important insight into whether current trends represent genuine organizational change or superficial adoption of new terminology in response to external pressures. Ultimately, this research contributes to the Journal of Macromarketing's call for critical inquiry into the emancipatory potential of AI. By tracing how CDR practices either constrain or enable consumer agency in increasingly algorithmic marketplaces, we position marketers as essential architects of ethical and inclusive digital transformation.

Conclusion

Through a posthumanist lens, we show how patterns of selective SDG engagement could suggest corporate reluctance to engage with contested human-technology relationships, indicating that current sustainability narratives may limit rather than expand the consumer empowerment needed for responsible digital transformation. By integrating alignment theory with macromarketing's transformative ideals, we offer a framework for evaluating corporate sustainability commitments as indicators of digital responsibility maturity. The proposed longitudinal study will track how these corporate narratives evolve under intensifying AI regulation and public scrutiny. Marketers and corporate leaders must move beyond reputational signaling and embrace authentic integration of digital ethics that preserves and enhances consumer agency in an increasingly algorithmic world.

References

- Adam, M., Wessel, M., & Benlian, A. (2021). AI-based chatbots in customer service and their effects on user compliance. *Electronic Markets*, 31(2), 427-445.
- Airoidi, Massimo, and Joonas Rokka. "Algorithmic consumer culture." *Consumption Markets & Culture* 25.5 (2022): 411-428.

- Al-Surmi, A., Cao, G., & Duan, Y. (2020). The impact of aligning business, IT, and marketing strategies on firm performance. *Industrial Marketing Management*, 84, 39-49.
- André, Q., Carmon, Z., Wertenbroch, K., Crum, A., Frank, D., Goldstein, W., ... & Yang, H. (2018). Consumer choice and autonomy in the age of artificial intelligence and big data. *Customer needs and solutions*, 5, 28-37.
- Aragani, V. M., Anumolu, V. R., & Selvakumar, P. (2025). Democratization in the Age of Algorithms: Navigating Opportunities and Challenges. *Democracy and Democratization in the Age of AI*, 39-56.
- Basu, S., Jha, S., Ooi, K. B., & Cham, T. H. (2025). Unveiling the Potential of Corporate Digital Responsibility (CDR). *Journal of Computer Information Systems*, 1-33.
- Bauman, Z. (2001). Identity in the globalising world. *Social anthropology*, 9(2), 121-129.
- Berger, J., Humphreys, A., Ludwig, S., Moe, W. W., Netzer, O., & Schweidel, D. A. (2020). Uniting the tribes: Using text for marketing insight. *Journal of Marketing*, 84(1), 1-25.
- Carl, K. V., & Hinz, O. (2024). What we already know about corporate digital responsibility in IS research: A review and conceptualization of potential CDR activities. *Electronic Markets*, 34(1), 27.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business horizons*, 34(4), 39-48.
- Chong, A. Y. L., Ch'ng, E., Liu, M. J., & Li, B. (2017). Predicting consumer product demands via Big Data: the roles of online promotional marketing and online reviews. *International Journal of Production Research*, 55(17), 5142-5156.
- Chorn, N. H. (1991). The "alignment" theory: Creating strategic fit. *Management Decision*, 29(1).
- Danaher, J. (2019). The rise of the robots and the crisis of moral patency. *AI & Society*, 34(1), 129-136.
- Ferrell, O. C., & Ferrell, L. (2021). New directions for marketing ethics and social responsibility research. *Journal of Marketing Theory and Practice*, 29(1), 13-22.
- Fildes, R., Ma, S., & Kolassa, S. (2022). Retail forecasting: Research and practice. *International Journal of Forecasting*, 38(4), 1283-1318.
- Fountain, T., McCarthy, B., & Saleh, T. (2019). Building the AI-powered organization. *Harvard Business Review*, 97(4), 62-73.
- Fowler, J. G., Watson, A., & Royle, M. T. (2024). Commentary on "AI is Changing the World: For Better or Worse" using a Neo-Colonialism Perspective. *Journal of Macromarketing*, 44(4), 900-905.
- Gulati, R., & Wohlgezogen, F. (2023). Can purpose foster stakeholder trust in corporations?. *Strategy Science*, 8(2), 270-287.
- Hartley, N., Kunz, W., & Tarbit, J. (2024). The corporate digital responsibility (CDR) calculus: How and why organizations reconcile digital and ethical trade-offs for growth. *Organizational Dynamics*, 53(2),
- Heras-Saizarbitoria, I., Urbieto, L., & Boiral, O. (2022). Organizations' engagement with sustainable development goals: From cherry-picking to SDG-washing? *Corporate Social Responsibility and Environmental Management*, 29(2), 316-328.
- Herden, C. J., Alliu, E., Cakici, A., Cormier, T., Deguelle, C., Gambhir, S., ... & Edinger-Schons, L. M. (2021, March). Corporate Digital Responsibility, New corporate responsibilities in the digital age. In *Sustainability*

Management Forum Nachhaltigkeits Management Forum (Vol. 29, No. 1, pp. 13-29). Berlin/Heidelberg: Springer Berlin Heidelberg.

- Ioannou, I. (2025). What the ESG backlash reveals — and what comes next. *Forbes*.
<https://www.forbes.com/sites/lbsbusinessstrategyreview/2025/03/25/what-the-esg-backlash-reveals-and-what-comes-next/>
- Joseph, J. (2025). The algorithmic self: how AI is reshaping human identity, introspection, and agency. *Frontiers in Psychology*, 16, 1645795.
- Knudsen, E. S., Lien, L. B., Timmermans, B., Belik, I., & Pandey, S. (2021). Stability in turbulent times? The effect of digitalization on the sustainability of competitive advantage. *Journal of Business Research*, 128, 360-369.
- Krafft, M., Sajtos, L., & Haenlein, M. (2020). Challenges and opportunities for marketing scholars in times of the fourth industrial revolution. *Journal of Interactive Marketing*, 51(1), 1-8.
- Kunz, W. H., & Wirtz, J. (2024). Corporate digital responsibility (CDR) in the age of AI: implications for interactive marketing. *Journal of Research in Interactive Marketing*, 18(1), 31-37.
- Leung, E. (2025). Technological Shaping of Consumer Identity. In *The Routledge Handbook of Identity and Consumption* (pp. 210-220). Routledge.
- Liyanaarachchi, G., Deshpande, S., & Weaven, S. (2021). Market-oriented corporate digital responsibility to manage data vulnerability in online banking. *International Journal of Bank Marketing*, 39(4), 571-591.
- Lobschat, L., Mueller, B., Eggers, F., Brandimarte, L., Diefenbach, S., Kroschke, M., & Wirtz, J. (2021). Corporate digital responsibility. *Journal of Business Research*, 122, 875-888.
- Nweke, O., & Adelusi, O. (2025). Utilizing AI driven forecasting, optimization, and data insights to strengthen corporate strategic planning. *International Journal of Research Publication and Reviews*, 6(3), 4260-4272.
- Puntoni, S. (2024). Artificial Intelligence in Marketing: From Computer Science to Social Science. *Journal of Macromarketing*, 44(4), 883-885.
- Sandua, D. (2025). The singularity: AI and human transformation.
- Thyroff, A., Hawkins, M. A., & Akdevelioglu, D. (2023). Thinking big about going small: Conceptualizing the human-technology integration spectrum. *Journal of Macromarketing*, 43(4), 433-440.
- United Nations General Assembly. (2015). Transforming our world: the 2030 Agenda for Sustainable Development (Resolution A/RES/70/1). United Nations. <https://sdgs.un.org/2030agenda>
- Van Zanten, J. A., & Van Tulder, R. (2018). Multinational enterprises and the Sustainable Development Goals: An institutional approach to corporate engagement. *Journal of International Business Policy*, 1(3), 208-233.
- Wirtz, J., Kunz, W. H., Hartley, N., & Tarbit, J. (2023). Corporate digital responsibility in service firms and their ecosystems. *Journal of Service Research*, 26(2), 173-190.
- Zimmerman, A., Janhonen, J., & Beer, E. (2024). Human/AI relationships: challenges, downsides, and impacts on human/human relationships. *AI and Ethics*, 4(4), 1555-1567.