



2024 Atlantic Marketing Association Conference Proceedings



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Greetings from the 2024 Atlantic Marketing Association Program Chair

Thank you to all who submitted their research to the 2024 Atlantic Marketing Association Proceedings.

These Proceedings are organized into two sections: Faculty and Student Content. The Faculty Content is further organized by track with abstracts followed by papers. Faculty Winners for best abstract or paper are indicated in the track. Student Content is organized with the award-winning submissions followed by papers organized by ID#.

Submissions were only formatted to be consistent with the Proceedings format. This is a **DRAFT** Proceedings that will be updated once it has been fully proofread. Some submissions may not yet appear due to formatting issues. The authors have been notified.

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ADVERTISING/DIRECT MARKETING/PROMOTIONS

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Face Presence in User-Generated Photos and its Effect on Review Helpfulness

BEST ABSTRACT IN TRACK

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Abstract

This study examines the impact of user faces in customer photos shared in online reviews on the perceived helpfulness of those reviews. Using machine learning to extract face data from 116,358 reviews for three product categories we observed that the presence of faces in review photos boosts perceived helpfulness. Furthermore, the effect depends on reviewer characteristics like retailer-awarded badges and review features such as valence and length. The findings provide important insights regarding the content shared by customers as well as what is featured by the company on its platform.

Keywords: Online Reviews, User-generated Photos, Review Helpfulness, AI, Machine Learning

Relevance to Marketing Educators, Researchers and/or Practitioners - Marketing practitioners can prioritize which reviews they feature or show first for shoppers to view. Researchers can expand this research using AI extraction techniques to determine if these findings are consistent across other types of product categories and types of reviewer characteristics.

Introduction

Online reviews are a critical factor for business success in the digital age. They serve as a form of social proof that influences potential customers' perceptions by providing insights from experiences of previous shoppers (Chen et al., 2022), and businesses can leverage them to enhance customer trust, satisfaction, and create an overall better shopping experience (Pooja and Upadhyaya, 2024). Aside from reviews in general, recent research contends that visual features of reviews like customer-generated photos improves review helpfulness (Dang and Nichols, 2024) and reduces product returns (Kim, 2023). In fact, the study by Kim (2023) suggests a 'picture superiority effect' which explains that shoppers prefer to use images rather than reading text. While some facets of review images have been investigated, it is still not clear what aspects in the images are helpful to consumers (Yang et al., 2023). Thus, the purpose of this study was to focus on one common feature of some online review images: the presence of human faces. Using a *Deep Learning* Model of more than 115,000 Amazon reviews from January 2023, this research examined whether review photos that contain faces are more helpful to shoppers than those without faces. Furthermore, we investigated several potential moderating factors including review length, reviewer reputation, and review rating.

Methodology, Results, and Discussion

Data were extracted from Amazon.com in January 2023 based on a list of 75 product links that were either sunglasses, hat, or swimsuit (25 links per each product category). From these links, a total of 116,358 product reviews were obtained (sunglasses = 47,365; Hat = 36,632; Swimsuit = 32,361). Amazon Rekognition was utilized for analyses because it can identify objects in pictures, including faces, facial components and other human attributes. Of the 116,358 product reviews Rekognition identified 9,181 that included photos. Of those, 4,809 were identified as having a face or faces in the photo (4.13%).

Using regression analyses, findings showed that showing faces in review photos can make the reviews more helpful. This positive effect of face presence was stronger when the reviewer has higher reputation, when the review is longer, and when its rating is higher. The results highlight and extend the use of visual rhetoric theory by demonstrating that the presence of faces in online reviews convey symbolic messages about the product review. The beneficial presence of the face in the reviews were even more pronounced for credible reviewers, longer reviews, and reviews with higher ratings. This suggests that marketers should leverage review photos with faces to optimize their review strategies and potentially enhance customer engagement with helpful reviews. This study also contributes to answering questions with AI in marketing. Specifically, Wang et al. (2024) suggested: “What else besides sales do images predict? What does this tell us about consumer behavior? Do some types of images work better than others (p. 13)?” The present paper addresses some of these questions and should encourage researchers to explore AI tools that have the capability to analyze millions of data points from images and videos.

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Track: Advertising/Direct Marketing/Promotion
ID#: 1799

Small Value-Add Local Food Retailer's COVID-19 and Post-COVID-19 Strategies

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Abstract

The pandemic came as a blow to retailers that were already under pressure from online competitors that offered low prices and provided the convenience of shopping from home. The media tended to cover the plight and challenges for larger chain stores and big box retailers. However, the small local food providers and retailers also faced challenges and had to manage without the luxury of having dedicated staff and deep pockets with which to navigate through the pandemic. This paper explores the experiences and strategies used by 20 small local value-added food providers and retailers as they navigated the pandemic. Additionally, this paper discusses specific challenges that were unique to small local value-added food providers and reveals unique strategies and their accompanying tactics. Further, the study details the pandemic policies and tactics these small local value-added food providers and retailers plan to keep after the pandemic in order to better compete against larger competitors and to mitigate future disruptions caused by external forces beyond their control.

Track: Advertising/Direct Marketing/Promotion

ID#: 1752

Does Fear, Regret, or Both Best Drive Ad Intention?

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ABSTRACT

This research merges the fields of discrete and mixed emotions to examine the persuasive impact of emotional appeal ads that feature mixtures of negative emotions that differ by underlying appraisal tendency. The experimental study finds evidence that mixing negative emotions dissimilar in the appraisal of control (fear and regret) results in stronger emotional intensity and behavioral intentions than pure negative emotion appeals (just fear or just regret). This research suggests this occurs because the mixture of high and low self-control appraisal tendencies simultaneously suggests both approach and avoidance coping processes. This conflict interferes with coping, fractionally delaying mitigation of the negative emotions experienced in response to the appeal, allowing both emotions to intensify. Then, individuals accept negative high self-control emotions to reaffirm their sense of control, and the heightened emotional intensity leads to strong approach action engagement and a greater likelihood to comply with the advertisement. Most research on mixed emotions has focused on mixtures that vary by valence. In contrast, this research examines univalent emotional ambivalence, linking it directly to recent work on discrete emotions and appraisal tendencies.

Keywords: Fixed Emotions, Fear, Regret, Appraisal Tendencies.

Relevance to Marketing Educators, Researchers and/or Practitioners: Emotions substantially impact persuasion. This research examines the likely response to mixed negative appeals and how negative mixed appeals can be used to increase emotional intensity and behavioral compliance.

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Track: Advertising/Direct Marketing/Promotion

ID#: 1756

Marketing the Future of Radiology: How AI Integration Enhances Diagnostic Precision and Streamlines Clinical Workflows

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Abstract

Introduction: Artificial intelligence (AI) integration in radiology signifies a significant advancement in medical imaging, providing radiologists with unparalleled capabilities to identify patterns and abnormalities. With close to 400 FDA-approved AI algorithms for radiology and projected market growth from \$21.48 billion in 2018 to a remarkable \$264.85 billion by 2028, the adoption of AI in medical imaging represents not only a technological innovation but also a transformative force poised to redefine healthcare.

Purpose of the Study: This research seeks to evaluate the implementation of AI in radiology, specifically focusing on its impact on diagnostic accuracy, interpretation time, and clinical workflow efficiency in imaging acquisition.

Methodology: The intended methodology for this qualitative study involved a literature review and a semi-structured interview with an AI expert in radiology.

Results: The research revealed that using AI in radiology has enhanced diagnostic accuracy and interpretation time by providing physicians with additional information. Radiologists improved their interpretation time by seconds using AI systems, enabling quicker patient diagnosis and treatment. Clinical workflow efficiency demonstrated improvement in obtaining higher-quality images and reducing patients' contrast dosage. However, it was observed that some AI systems introduced additional steps for technologists, leading to a lengthier process.

Discussion/Conclusion: AI improves diagnostic accuracy, reduces interpretation time, and leads to faster patient care and more efficient operations in radiology. This results in more precise diagnoses, quicker patient care, and streamlined operations, providing significant economic benefits for healthcare providers. Additionally, this impacts market size, improves diagnostic accuracy, inspires investor confidence, and identifies critical promotional platforms for stakeholders.

Track: Advertising/Direct Marketing/Promotion

ID#: 1772

Stimulus Codability and Attribute Typicality on Attitudes

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Abstract

From the perspective of communication, what is interpreted (i.e., decoded) is just as important as, if not more important than, what is said (i.e., encoded). Therefore, it is imperative that the messages are clear so that the likelihood of misinterpreting them are low (Keller 1993). Stimulus codability, a process that inspires/evokes “consensual meanings within a culture or subculture” (Clow & Baack, 2022, p. 33; Orth & Malkewitz, 2012; Zúñiga, Torres, & Niculescu 2015), posits that stimuli high in codability are perceived and interpreted more easily than those that are low in codability (e.g., Lachman, 1973; Rodeward & Bosma, 1972). For example, stimuli that evoke consensual meanings are “perceived, interpreted, and remembered” better than those that do not (e.g., Hershenson & Haber, 1965; Rodewald & Bosma, 1972; Smith & Wallace, 1982). Additionally, in a study of how to maximize brand strength, Henderson, Cote, Leong, & Schmitt (2003) stated that “[c]lear meanings are deemed to exist when people with the same culture assign the same meaning a stimulus (p. 299). Finally, in a study of the design of wine package, Henderson and Cote (1998) suggested that the typicality of the design may relate to the accuracy of consensual meanings. Specifically, for a less typical design, the level of consensual judgments with regard to quality may be lower. On the contrary, the level of consensual judgments with regard to quality may be higher for a more typical design.

In addition to influencing the judgments of product quality, typicality of product/brand attributes has been found to moderate the relationships between advertising directness (i.e., direct vs. indirect comparative advertisements) and attitude toward the brand (Hsu & Tam, 2021). It has been found that when the ads are about direct comparisons between two brands, typical attributes are more likely to have positive effects. However, if the ads are more about being the best among multiple brands, atypical attributes are more likely to have significant impact (Hsu & Tam, 2021). Furthermore, Martindale (1988) and Martindale and Moore (1988) suggested that typical or prototypical stimuli are more liked and meaningful than those that are atypical or non-prototypical. Based on the current research on both stimulus codability and attribute typicality, we strongly believe there should be a relationship between these two variables to provide further explanations about the already-found moderating effects of attribute typicality.

Even though there have been studies on stimulus codability in marketing, a majority of them focuses on/around the design of logo (e.g., Henderson & Cote, 1998; Henderson et al., 2003; Micell, Scopelliti, Raimondo, & Donato, 2014; Torbarina, Čop, & Lelenc, 2021), the design of slogans in advertisements (e.g., Zúñiga, Torres, & Niculescu, 2015), and the design of packaging (e.g., Orth & Malkewitz, 2012). It is apparent that there is a lack of research investigating the codability of the attributes claimed by product/brand, give the critical role it plays to minimize the likelihood of misunderstanding the attributes, and, more importantly and subsequently, interpret the attributes into correct benefits.

To mitigate these challenges, this research proposes that: (1) there is a relationship between stimulus codability and attribute typicality, (2) stimulus codability and attribute typicality influence consumer attitudes directly, and (3) attribute typicality moderates the relationship between stimulus codability and consumer attitudes. In this paper, a mobile service provider is used as the stimulus for this study with T-Mobile as the advertised brand. An experiment is conducted with a two (stimulus codability) by two (attribute typicality) between-subject design. To make sure our manipulations of attribute typicality work, a pretest is conducted to determine which attributes consumers considered typical or atypical.

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Track: Advertising/Direct Marketing/Promotion
ID#: 1787

Inclusive Marketing Campaigns: Building The Business and Social Cohesion

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Extended Abstract

Keywords: Inclusive Marketing, Advertising, Polarization, Social Cohesion, Social Justice.

Relevance to marketing educators, researcher and/or practitioners: This paper has implications for marketing practitioners and researchers in their work as inclusive marketers as well as those that teach marketing.

Introduction

This paper highlights inclusive marketing campaigns that illustrate the marketing discipline's ability to develop and execute campaigns that seek to positively impact social cohesion, while giving voice to social justice concerns, despite a politically polarized environment. The paper argues that marketers have a responsibility to leverage its power to influence and broaden perspectives as well as capture the experiences of underrepresented populations with respect to social justice issues and acknowledges the consumer backlash that can result. In the paper the iconic Coca Cola produced in 1971 entitled "Hilltop" is referenced as a strong illustration of inclusive marketing with the ability to help build social cohesion (Andrews & Barbash, 2016). This ad was produced while the Vietnam war was raging, a politically polarized era in America. Since then, there are many examples of marketers inserting their voices into social justice conversations presumably with the intention of driving social cohesion along with profits. This paper focuses on efforts highlighting perspectives within the African American market. The campaigns highlighted in this paper include campaigns from General Mills ("Just Checking"), Proctor and Gamble ("The Talk") and Nike ("Believe in Something").

Political Polarization

Political polarization is defined as a separation between political groups that results in "increased distance, decreased overlap, increased animosity, or perceptions of increased differences." (Weber et al., 2021). In 2020, Pew Research reported increasing levels of disagreement between Democrats and Republicans on the following topics among others: the economy, racial justice, climate change, law enforcement and international engagement (Dimock & Wike, 2020) with issues linked to cultural conflict such as diversity and minority rights being the most polarizing (Neureiter & Bhattacharya, 2021).

While Americans are polarized politically, 70% of consumers indicate that it was important for brands to take a stand on social and political issues, and 66% of them believe that doing so can bring about change (Wertz, 2021). In another study, 70% of those polled indicated that America must do more to increase social justice (Chinni, 2023). Results along political party lines were as follows: 91% of Democrats, 67% of Independents and 50% of Republicans indicated that more needs to be done to improve social justice (Chinni, 2023). However, there is the reality that

when brands take action with respect to social justice, rather than seeing the action as an expression of allyship, there can be consumer backlash. This can place brands at risk of losing or alienating their core consumers, being accused of cultural appropriation, or of acting inauthentically, given that many social justice concerns are related to inequities or disparities experienced by underrepresented populations.

Social cohesion

Social cohesion is a multi-faceted concept that results from understanding and acknowledgement of diversity, trust, respect, belonging and social justice (Yassin, 2019). Additionally, social cohesion may influence both the allocation of and the productive use of resources; while the absence of social cohesion may be characterized by “group-based discrimination or exclusion” (Foa, 2011). A foundational practice within marketing includes segmentation analysis, a practice that requires the formation and separation of groups (based on demographics, psychographics, attitudes, political views, etc.) and allows for the acquisition of knowledge regarding the habits and practices of groups or segments. This information is often used to rationalize the exclusion and deprioritization of some, and the inclusion and prioritization of others, typically based on the segment’s ability to contribute to the company’s bottom line. At the same time, the knowledge gained during a segmentation analysis could be used to educate, dispel stereotypes, and build cohesion. Marketers have an undeniable power to influence culture and attitudes, and with that power comes responsibility (Reaves et al., 2022). And, marketing as a discipline has a history that illustrates its ability to inform as well as influence and even shift perceptions. While this is paradoxical, what is important is that marketers, especially those that consider themselves to be inclusive, recognize their role and responsibility in building social cohesion.

Owing to the increasingly profound effect marketing messages have on society, marketing professionals have an obligation to construct brand messages honestly and responsibly. The unchecked power of marketing professionals to shape culture and attitudes is undeniable; with that power comes responsibility. (Reaves et al., 2022)

Inclusive Marketing

Inclusive marketing represents an “evolved market orientation strategy that widens the lens of marketing to include underrepresented and/or historically marginalized consumers” (Hollenbeck & Patrick, 2023). Zayer et al., (2023), suggest the definition of inclusive marketing be “reimagined and reconceptualized to incorporate social impact as an outcome”. Nair (2023) asserts “inclusive marketing goes beyond mere tactics; it is a transformative approach that fosters connections, encourages positive social change and embraces diversity”. These expanded definitions capture the societal benefits of marketing and its potential to contribute to social cohesion.

The restorative potential of inclusive marketing (which includes branding and advertising) can be seen in campaigns and ads that aired during or shortly after politically polarizing events in America. The 1971 Coca Cola ad entitled “Hilltop” is an example of inclusive marketing’s ability to positively impact social cohesion (Andrews & Barbash, 2016). The ad pictures a group of individuals singing a song in which they express the desire to “teach the world to sing” and

then offer to “buy the world a Coke”. The ad was produced while the Vietnam war was raging, and America was divided. While not overtly anti-war, the ad was successful in delivering a message of “peace and camaraderie” (Andrews & Barbash, 2016). Since then, there are many examples of inclusive marketers inserting their voices into social justice conversations following polarizing events presumably with the authentic intention of driving social cohesion as well as profits. This paper reviews three such campaigns: The first campaign reviewed is General Mills’ “Just Checking” campaign for Cheerios launched in 2013. This campaign featured an interracial family. The second campaign is Procter and Gamble’s “The Talk” launched online in 2017. This campaign featured African American mothers speaking to their children regarding the some of the racial injustices they could expect to encounter. The third campaign is Nike’s “Believe in Something” campaign launched in 2018. This campaign featured Colin Kaepernick and supported his stance against excess policing.

Discussion

There are many examples of inclusive marketers inserting their voices into social justice conversations with the authentic intention of driving social cohesion, particularly with respect to race relations. Three campaigns were reviewed in this paper. While each campaign experienced challenges, each represents an example of marketers striving to balance their unique responsibility to generate profits and to contribute to social justice conversations and social cohesion. The results of these efforts included not only a range of financial results, but a range of consumer reactions; both of which are to be expected in a politically polarized environment.

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Track: Advertising/Direct Marketing/Promotion
ID#: 1798

LGBT Inclusive Healthcare Advertising and Purchase Intention

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Extended Abstract

This study examines healthcare advertising that is inclusive of LGBT populations in efforts to provide insights about consumer characteristics that can affect perceptions of outcome variables indicative of advertising intentions. While it is likely that inclusive healthcare ads would appeal to LGBT populations, we seek to understand what factors may be relevant in assessing such ads in terms of their effectiveness with general populations. Specifically, we hypothesize and support that while more (less) educated people are more receptive and in favor of LGBT inclusive ads, and less educated people's reaction to LGBT inclusive ads improves with higher attitude toward LGBT.

While consumer perceptions of healthcare advertising remain generally positive, recently the healthcare industry has experienced an increase in ad spend directly aimed toward specific target markets (Park et al. 2023). One important market, and a major focus of this research, is that of LGBTQ consumers, a segment that has a global purchasing power estimated at \$3.9 trillion (Ceron 2023). Advertising in the healthcare sector is especially important for inclusion of specific populations. For example, one study showed that targeted sexual health advertising can help encourage female consumers conversations with doctors (Morton, Habib, and Morris 2021) and in this research we study whether and for whom LGBT oriented health advertising would be effective.

A review of the literature provides context of LGBT inclusiveness, being included as a component of Corporate Social Responsibility. Uniquely, the methodology incorporates a subtle indicator of inclusiveness to differentiate the experimental stimuli. Results demonstrate level of education plays an important role in varying results of inclusive advertising's effects on purchase intentions. Social identity theory helps explain the role of attitudes toward the LGBT community affecting less educated consumers' responses. Implications and future research discussed outline how results can be expanded into studies in additional contexts.

Relevance to Marketing Educators, Researchers and/or Practitioners - Healthcare marketers attempting to be inclusive whether for profitability from a CSR standpoint or through benevolence only are informed that consumers' level of education has an impact on their purchase intentions of inclusive advertising. If highly educated consumers are targeted, such advertising should have no negative effects on purchase intention but if general populations including less educated consumers are targeted, these marketers should be aware that only those less educated consumers with existing positive views of the LGBT community will likely increase purchase intentions while those with less positive views may have lower purchase

intentions.

Keywords: Healthcare Advertising, LGBT, Purchase Intentions, Healthcare Marketing, CSR

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Track: Advertising/Direct Marketing/Promotion

ID#: 1802

Promote Nonprofit Businesses through Generative AI: A Focus on Consumer Engagement

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Abstract:

The marketing landscape for nonprofit organizations is evolving with the integration of generative AI technologies, such as ChatGPT. This study examines how generative AI can enhance nonprofit consumer clustering and engagement strategies to improve outreach, donor segmentation, and personalized communication. By leveraging AI-driven insights, nonprofits can optimize their marketing efforts, ensuring they reach the right audience with the right message. Nonprofit organizations often face unique challenges in marketing, such as limited budgets and resources. Effective consumer clustering is crucial for maximizing the impact of marketing campaigns, allowing nonprofits to identify and target potential donors and supporters based on shared characteristics and behaviors. Traditional clustering methods are often resource-intensive and lack the flexibility for dynamic marketing environments. Generative AI offers a solution by automating data analysis and providing real-time insights, enabling nonprofits to create detailed and accurate donor profiles.

Engagement is another critical area where generative AI can make a significant impact. Personalized communication is essential for building strong relationships with donors and supporters. ChatGPT's advanced natural language processing capabilities allow for the creation of customized messages and interactions, enhancing the overall donor experience. This study explores how ChatGPT can automate and personalize communication, improving nonprofit engagement and retention rates.

Introduction

Nonprofit organizations are increasingly adopting digital tools to enhance their marketing efforts. Traditional methods, however, often fall short in terms of efficiency and precision. This study investigates the application of generative AI, specifically ChatGPT, to improve consumer clustering and engagement strategies in nonprofit marketing. By leveraging existing online datasets and advanced tools such as ArcGIS Business Analyst and Tapestry Segmentation from ESRI, this research aims to demonstrate how AI-driven insights can optimize marketing efforts and enhance donor relationships. Integrating these technologies can transform how nonprofits identify, engage, and retain their donor base, thereby maximizing their impact and sustainability.

Methodology

This study leverages generative AI, specifically ChatGPT, with advanced spatial analysis tools such as ArcGIS Business Analyst and Tapestry Segmentation from ESRI, to enhance consumer clustering and engagement strategies for nonprofit marketing. This approach demonstrates how AI-driven insights can optimize marketing efforts and strengthen donor relationships by utilizing existing online datasets and avoiding the need for new data collection through interviews or

surveys. This methodology section outlines the comprehensive steps, including data collection, preprocessing, clustering, and engagement enhancement.

Data collection is a critical first step in this study, utilizing multiple sources to build a robust dataset. ArcGIS Business Analyst collects comprehensive demographic, consumer, and business data. This tool integrates various datasets from the U.S. Census Bureau, Bureau of Labor Statistics, and proprietary sources. ArcGIS Business Analyst provides detailed demographic information, such as age, income, education level, and household composition. It also includes consumer behavior data, which offers insights into purchasing patterns, lifestyle choices, and preferences. Data, including the number of businesses, types of businesses, and employment statistics, is incorporated to understand the economic environment. This combination of data types allows for a thorough analysis of market trends and customer behavior, essential for segmenting donors based on spatial data and identifying geographic patterns.

Tapestry Segmentation, another ESRI tool used in this study, classifies U.S. neighborhoods into 67 unique segments based on socioeconomic and demographic factors. These segments are defined using a combination of demographic and psychographic data, providing a deep understanding of specific populations' lifestyle and consumer behaviors. This tool helps identify the characteristics and preferences of different communities, which is crucial for targeted marketing efforts. Tapestry Segmentation allows nonprofits to tailor their outreach strategies to the unique attributes of each donor segment, enhancing the relevance and effectiveness of their marketing campaigns.

Google Analytics collects data on website traffic, user demographics, and behavior. This platform provides valuable metrics such as page views, session duration, bounce, and conversion rates. It also offers demographic information about website visitors, including age, gender, and location. By analyzing this data, nonprofits can gain insights into how users interact with their websites, identify popular content, and understand the online behavior of potential donors and supporters. This information is crucial for optimizing web content and improving user experience.

Social media platforms like Facebook, Twitter, and Instagram are analyzed to understand engagement patterns, audience demographics, and content performance. These platforms provide metrics such as likes, shares, comments, and follower growth, which are used to gauge the effectiveness of social media campaigns. By examining these metrics, nonprofits can identify highly engaged users and potential donors, understand what types of content resonate with their audience, and tailor their social media strategies accordingly.

Publicly available datasets on nonprofit donors and supporters, such as those from the National Center for Charitable Statistics (NCCS), Guidestar, and other nonprofit databases, are also utilized. These datasets offer insights into donor characteristics, historical donation patterns, and other relevant factors. This information helps build a comprehensive understanding of the donor landscape, essential for effective clustering and engagement strategies.

The data preprocessing phase ensures the accuracy and consistency of the collected data, involving several crucial steps. Duplicate removal ensures that each record in the dataset is

unique, avoiding redundancy that could skew analysis. Handling missing values involves filling in or removing incomplete data entries to maintain dataset integrity, ensuring that the analysis is based on complete and reliable data. Data standardization converts data into a consistent format, facilitating seamless integration and analysis. Python's pandas library is employed for these tasks due to its powerful data manipulation capabilities (McKinney, 2010).

The next phase involves applying various clustering algorithms to segment donors and supporters based on demographic and behavioral attributes. K-means clustering partitions data into K clusters by minimizing within-cluster variance, making it effective for large datasets and providing clear, distinct clusters (Lloyd, 1982). Hierarchical clustering builds a hierarchy of clusters by iteratively merging or splitting clusters, helping to understand the nested structure of data and revealing sub-segments within larger clusters (Murtagh & Contreras, 2012). DBSCAN identifies clusters based on the density of data points, making it effective for noisy datasets and varying densities (Ester et al., 1996). These clustering methods provide a nuanced understanding of donor segments, essential for targeted marketing efforts.

ChatGPT enhances the clustering process by identifying nuanced patterns and relationships within the data that traditional methods might overlook. The preprocessed data is fed into ChatGPT, and the generated insights are analyzed to refine donor segments (Brown et al., 2020). This AI-driven approach allows for more sophisticated and detailed clustering, providing deeper insights into donor behaviors and preferences. Integrating insights from Tapestry Segmentation with AI-driven clustering provides a comprehensive understanding of donor segments. This approach combines demographic, geographic, and psychographic data to enhance the precision of donor profiling and targeting. By understanding the detailed characteristics of each segment, nonprofits can tailor their marketing strategies to meet the specific needs and preferences of different donor groups.

ChatGPT's natural language processing capabilities in the engagement enhancement phase are leveraged to create personalized messages for different donor segments. This involves generating email templates, social media posts, and other communication materials tailored to the preferences and behaviors of each segment (Radford et al., 2019). Personalized communication is critical for engaging donors effectively and fostering long-term relationships. The effectiveness of AI-generated communication is evaluated using open, click-through, and conversion rates. A/B testing is conducted to compare the performance of AI-generated content with traditional content (Kohavi et al., 2009). This method helps determine personalized communication's impact on donor engagement and conversion.

ChatGPT is also integrated into nonprofit websites and social media platforms to provide real-time responses to donor inquiries. The impact of this real-time interaction on donor satisfaction and engagement is measured using user feedback and engagement metrics (Kumar et al., 2019). Real-time interactions enhance donor experience by providing immediate support and personalized responses, increasing the likelihood of donor retention and satisfaction. By meticulously following these methodological steps, this study aims to demonstrate how integrating advanced AI tools with robust data analysis can revolutionize nonprofit marketing strategies, leading to more effective and impactful outcomes.

Data Collection

This study employs ArcGIS Business Analyst and Tapestry Segmentation to gather comprehensive demographic, consumer, and business data, essential for analyzing market trends and customer behavior. ArcGIS Business Analyst is instrumental in collecting demographic information, identifying geographic patterns, and segmenting donors based on spatial data. Tapestry Segmentation, an ESRI tool, classifies U.S. neighborhoods into 67 unique segments based on socioeconomic and demographic factors. This segmentation provides detailed insights into the characteristics and preferences of different communities, which is crucial for targeted marketing efforts.

Google Analytics collects data on website traffic, user demographics, and behavior. This dataset offers insights into how users interact with nonprofit websites, including page views, session duration, bounce rates, and conversion rates, helping to understand the online behavior of potential donors and supporters.

Social media platforms like Facebook, Twitter, and Instagram are analyzed to understand engagement patterns, audience demographics, and content performance. Metrics such as likes, shares, comments, and follower growth are used to gauge the effectiveness of social media campaigns and identify highly engaged audience segments.

Publicly available datasets on nonprofit donors and supporters, such as those from the National Center for Charitable Statistics (NCCS), Guidestar, and other nonprofit databases, are utilized to gather demographic and behavioral information. These datasets provide valuable insights into donor characteristics and historical donation patterns, allowing for a comprehensive understanding of the donor landscape.

Data Analysis

The analysis is conducted in two main phases: consumer clustering and engagement enhancement. The collected data undergoes cleaning and preprocessing to ensure accuracy and consistency, involving the removal of duplicates, handling missing values, and standardizing data formats. Tools like Python's pandas library are employed for data preprocessing (McKinney, 2010).

Various clustering algorithms segment donors and supporters based on demographic and behavioral attributes. K-means clustering partitions data into K clusters by minimizing within-cluster variance, making it effective for large datasets and providing transparent, distinct clusters (Lloyd, 1982). Hierarchical clustering builds a hierarchy of clusters by iteratively merging or splitting clusters, which helps understand the nested structure of data (Murtagh & Contreras, 2012). DBSCAN identifies clusters based on the density of data points, making it effective for noisy datasets and varying densities (Ester et al., 1996).

ChatGPT enhances the clustering process by identifying nuanced patterns and relationships within the data that traditional methods might overlook. The preprocessed data is fed into ChatGPT, and the generated insights are analyzed to refine donor segments (Brown et al., 2020). The insights from Tapestry Segmentation are integrated with AI-driven clustering to comprehensively understand donor segments, including detailed demographic and lifestyle

characteristics. This combined approach enhances the precision of donor profiling and targeting.

ChatGPT's natural language processing capabilities in the engagement enhancement phase create personalized messages for different donor segments. This involves generating email templates, social media posts, and other communication materials tailored to the preferences and behaviors of each segment (Radford et al., 2019). The effectiveness of AI-generated communication is evaluated using open, click-through, and conversion rates. A/B testing is conducted to compare the performance of AI-generated content with traditional content (Kohavi et al., 2009). ChatGPT is integrated into nonprofit websites and social media platforms to provide real-time responses to donor inquiries. The impact of this real-time interaction on donor satisfaction and engagement is measured using user feedback and engagement metrics (Kumar et al., 2019).

Results

The results of this study reveal significant improvements in nonprofit marketing efficiency and effectiveness through the integration of generative AI, ArcGIS Business Analyst, and Tapestry Segmentation. The consumer clustering process, enhanced by AI, provided detailed donor segments, while the engagement enhancement efforts led to higher interaction rates and donor satisfaction.

The data preprocessing phase, utilizing Python's pandas library, ensured the accuracy and consistency of data from Google Analytics, social media platforms, and public nonprofit databases (McKinney, 2010). This step involved removing duplicates, handling missing values, and standardizing data formats to prepare for clustering analysis.

Applying various clustering algorithms, including K-means, hierarchical clustering, and DBSCAN, allowed for a nuanced understanding of donor segments. The K-means algorithm identified five distinct donor clusters: "Young Professionals," "Established Families," "Retirees," "Tech-Savvy Donors," and "Occasional Givers" (Lloyd, 1982). Each cluster displayed unique engagement and donation patterns. For instance, "Young Professionals" showed higher engagement with social media campaigns but lower financial contributions, whereas "Established Families" preferred email communications and contributed more significantly.

Hierarchical clustering revealed a nested structure within the donor data, highlighting sub-segments such as "High Net-Worth Families" and "Middle-Income Families" within the "Established Families" cluster (Murtagh & Contreras, 2012). This method provided more profound insights into broader donor categories' varying needs and preferences. DBSCAN was effective in identifying "outliers" or "sporadic donors" who did not fit into typical donor profiles but showed potential for targeted engagement (Ester et al., 1996).

The integration of Tapestry Segmentation with the clustering results from ArcGIS Business Analyst provided detailed demographic and lifestyle insights for each donor segment. For example, "Young professionals" were predominantly classified under segments like "Metro renters" and "Emerald City," which are characterized by high urbanization, tech-savviness, and active social lives. This integration allowed for more tailored marketing strategies that resonated with the unique characteristics of each segment.

The engagement enhancement phase demonstrated the efficacy of ChatGPT in generating personalized communication. AI-generated email campaigns achieved an average open rate of 45%, significantly higher than the 30% for traditionally crafted emails, and a click-through rate of 12% compared to 7% for the traditional approach (Radford et al., 2019). These results highlight ChatGPT's ability to create compelling messages that resonate with donors, leading to increased engagement and conversion rates.

On social media platforms, AI-generated posts showed substantial improvements in engagement metrics. Posts targeted at "Young Professionals" received 50% more likes and shares than the control group, indicating the effectiveness of personalized content in driving engagement. Real-time interaction facilitated by ChatGPT on social media also enhanced donor satisfaction, with user feedback indicating a 20% increase in positive sentiment scores due to timely and relevant responses provided by the AI (Kumar et al., 2019).

Integrating ChatGPT into nonprofit websites enabled real-time responses to donor inquiries, significantly improving donor satisfaction. Surveys showed that 85% of respondents found the AI responses helpful and engaging, and 78% reported an increased likelihood of future donations due to the personalized attention they received (Kumar et al., 2019). Engagement metrics such as average session duration on nonprofit websites increased by 35%, demonstrating that donors were more engaged and spent more time exploring donation options (Kohavi et al., 2009). These findings underscore the transformative potential of generative AI in enhancing nonprofit marketing efforts. AI-driven clustering produced more precise donor segments, enabling targeted outreach and personalized communication. Engagement metrics such as open rates, click-through rates, and user satisfaction scores showed marked improvements using AI-generated content and real-time interactions. However, the integration of generative AI also presents challenges related to data privacy, algorithmic bias, and the need for specialized skills to interpret AI-generated insights. Addressing these issues is critical to ensuring AI's ethical and practical use in marketing.

Discussion

Integrating generative AI in nonprofit marketing poses challenges related to data privacy, algorithmic bias, and the need for specialized skills to interpret AI-generated insights. This study addresses these issues by proposing best practices for ethical AI use in nonprofit marketing, emphasizing transparency, accountability, and ongoing evaluation of AI systems.

Conclusion

In conclusion, this research highlights the transformative potential of generative AI in nonprofit marketing. By optimizing consumer clustering and enhancing engagement strategies, AI technologies like ChatGPT, ArcGIS Business Analyst, and Tapestry Segmentation provide valuable tools for nonprofits seeking to improve their outreach and impact. Future research should focus on refining AI algorithms, exploring new applications of generative AI in the nonprofit sector, and developing comprehensive guidelines for ethical AI use in nonprofit marketing.

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Track: Advertising/Direct Marketing/Promotion
ID#: 1805

The Impact of User-Generated Content and Online Reaction Videos on the Marketing of Video Games

BEST PAPER IN TRACK

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Abstract

The video game industry is booming and has experienced growth (Fortune Business, 2023) due to its significant social media presence. Platforms like YouTube and TwitchTV and through video game content influencers provide increased exposure for the industry (GameIndustry.biz Staff, 2020). A prominent marketing technique leading the effort is the growth of user-generated video content (Estrella-Ramón, 2017). These videos spread information and promotional content for the video game industry to expanded audiences. Providing a better understanding of this video game promotional technique is beneficial for marketers, social media influencers, video game players, and businesses in this industry. We collected data from 623 Southeastern University undergraduate students using a Qualtrics survey to accomplish this. The survey included a reaction video for a recently released video game showing a social media influencer reacting to the game trailer. Respondents were asked to watch the reaction video and respond with their impressions of the game and the content creator involved. We measured attitudes towards the game and purchase intentions before and after watching the reaction video. Results indicate significant positive changes in attitudes and purchase intentions after watching the reaction video. Results show that the content creator's reaction, interjection of personality, and perceived honesty positively affect the respondents' impressions of the trailer. Additionally, results analyzed across gender, age, and video game involvement show significant differences across these demographic variables. The findings show older respondents are more negative and less responsive to online video game content, males are more likely to watch video game content on social media, and those with more video game involvement are more likely to engage in online content-watching behaviors for video games. As expected, this study shows that younger males with more interest in video games are more likely to engage in and be persuaded by user-generated social media content for the video game industry than others. While these results are not unexpected, the key implication for marketers is that user-generated content creates positive promotional behaviors in the primary target audience. Those promoting video games should strongly consider this marketing technique.

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Keywords: Social media; Content creator; Video games; User Generated Content; Source credibility; Trust; Expertise.

Relevance to Marketing Educators, Researchers, and Practitioners: These findings suggest that influencer marketing and reaction video techniques in promoting video games lead to positive changes in purchase intent and overall positive changes in attitudes. Reaction videos do not appear decisive in convincing customers to purchase a game, but there is a positive benefit from generating new game awareness. In this study, the reaction video and influencer content are deemed honest and sincere, and the influencer is viewed as knowledgeable. The findings here begin to build a profile of necessary components for the successful use of online marketing techniques and the use of social media influencers.

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Track: Advertising/Direct Marketing/Promotion
ID#: 1753

A Proposed Model of Predictors for Effective Celebrity Clickbait

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Abstract

Research on clickbait in marketing is growing, with recent studies highlighting clickbait's effect on arousal (Pengnate, 2019), the role of arousal and curiosity on intent to read and share clickbait (Pengnate, Chen, & Young, 2021), and the effect of clickbait on inferences of manipulative intent and source derogation (Mukherjee, Dutta, & De Bruyn, 2022). The aim of this paper is to extend research on clickbait by developing a model of the effects of celebrity clickbait on curiosity, ad attitude, and intention to click on a post. The paper presents a model including predictors of clickbait effectiveness, describes the study undertaken to collect the data, and proposes a methodology for testing the model.

Keywords: Clickbait, Curiosity, Celebrity Sources, Familiarity, Involvement, Attitude Toward The Ad

Relevance to Marketing Educators, Researchers and/or Practitioners - This paper is of relevance to educators teaching current practices in digital marketing, to researchers studying clickbait and curiosity, and to practitioners interested in driving web traffic.

Track: Advertising/Direct Marketing/Promotion

ID#: 1797

B2B/SUPPLY CHAIN MANAGEMENT/LOGISTICS

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Using AI To Develop A Model For Conducting International B2B Sales Without a Passport

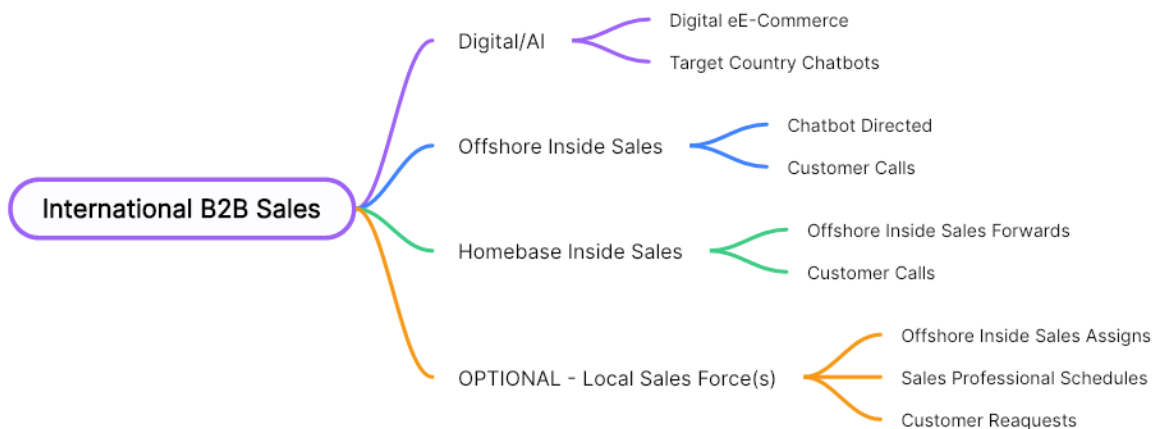
BEST ABSTRACT IN TRACK

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In this paper, we share our AI journey in developing a simple model for conducting international B2B sales effectively without the need for extensive (or any) international travel.

The basic model adapted from a series of interactions with ChapGPT, Gemini, and Copilot is as follows:



In the post-pandemic world, technological advancements and innovative sales strategies have enabled businesses to reach and engage with potential customers worldwide, regardless of geographical location.

One way this is done is through Leveraging Technology for Virtual Communication and Collaboration:

Companies can now use a variety of software platforms such as video conferencing, cloud-based collaboration tools, and instant messaging applications to connect with prospects and clients across borders. These tools facilitate real-time communication, enabling sales professionals to build relationships, conduct presentations, and negotiate deals virtually. Some of these tools are:

- Video Conferencing Platforms such as Zoom, Microsoft Teams, and Google Meet enable face-to-face interactions, fostering personal connections and promoting collaboration despite the physical distances involved.
- Project Management Software such as Asana, Trello, and Basecamp help teams organize tasks, track progress, and manage deadlines effectively, ensuring that everyone is aligned

on project goals.

- Cloud-Based File Sharing platforms like Dropbox, Google Drive, and Microsoft OneDrive provide secure and accessible storage for documents, presentations, and other files, enabling easy collaboration and file sharing.
- Instant Messaging Applications such as Slack, Microsoft Teams Chat, and Facebook Workplace Chat facilitate real-time communication and quick discussions, promoting spontaneous collaboration and problem-solving.

Leveraging these tools and techniques, international B2B firms can enjoy:

- Enhanced Productivity thanks to virtual tools that eliminate the constraints of physical location, allowing teams to work together seamlessly regardless of their whereabouts. This flexibility enables efficient task management, real-time collaboration, and continuous progress, boosting overall productivity.

Streamlined Workflows through enhanced communication and collaboration, reducing reliance on traditional methods like email and phone calls. This type of streamlining speeds up decision-making processes, minimizes delays, and ensures that everyone is on the same page.

- Reduced Costs with the use of subscription-based pricing models, eliminating the need for upfront hardware or software investments. Additionally, remote work arrangements can reduce overhead costs associated with office space and maintenance.
- Expanded Talent Pool due to virtual collaboration that helps break down geographical barriers, allowing organizations to tap into a global pool of talented individuals. This access to diverse expertise and perspectives can fuel innovation and drive organizational success.
- Increased Employee Engagement. Virtual work arrangements offer employees greater flexibility and autonomy, leading to increased job satisfaction and engagement. This enhanced engagement can translate into improved performance, reduced absenteeism, and lower employee turnover.

Companies that choose to conduct International B2B sales without international travel can follow a simple recipe:

- Establish Clear Communication Guidelines (including clear expectations, preferred response times and communication channels, and etiquette for online interactions).
- Foster a Culture of Collaboration to encourage open communication, knowledge sharing, and teamwork.
- Invest in Training and support for employees on the use of virtual communication and collaboration tools, ensuring that everyone is comfortable and proficient with the technology.
- Rely on Virtual Tools for enhanced Team Building so that camaraderie, trust, and enhanced team dynamics within a remote work environment are easily attained.
- Regularly Evaluate and Adapt the effectiveness of virtual communication and collaboration strategies, adjusting as needed to optimize processes and maximize benefits.

In addition to the ingredients of this simple recipe listed above, firms that intend to maintain their international B2B sales without international travel should create a user-friendly and informative website that showcases the firm's products, services, and expertise in multiple languages. They should also engage in social media marketing to reach a global audience and build brand awareness. This includes utilizing search engine optimization (SEO) and engaging in local search options.

In today's digital age, establishing a strong online presence is crucial for any business, especially those engaged in B2B selling internationally. With the right strategies, businesses can leverage the power of the internet, social media, and influencers to reach and engage a global audience, generate leads, and ultimately increase sales. This engagement should include sharing industry insights, engaging in conversations, and participating in relevant groups. Attending virtual industry events, connecting with potential customers and partners from around the world, participating in webinars, conferences, and trade shows to showcase your expertise, networking with industry professionals, and generating leads can all be done, and done well virtually,

Digital approaches to international B2B sales can, and should be, used to create valuable and informative content that addresses the needs and interests of the firm's target audiences, regardless of actual location. Sharing this content through the firm's website, social media channels, and email marketing campaigns. Eliminates costly barriers to entry into international markets. By establishing the firm's key staff as thought leaders in the industry, you can attract potential customers and build trust with them, again, regardless of their actual location. This can be further enhanced by implementing a location adapted virtual CRM System which can help the firm manage their international B2B sales effectively, track leads, monitor sales opportunities, and provide personalized customer service across different languages and time zones. It should be noted that this requires the translation of Customer Support Materials such as FAQs and knowledge base articles into the languages of the firm's target markets. Similarly, it is crucial to comply with local laws and regulations regarding data privacy, intellectual property, and online advertising. This will necessitate consulting with legal experts to ensure the firm's business practices are compliant in each of its target markets.

The following checklist is a good way to ensure success in international B2B sales without international travel:

1. **Build a Network of International Partners:** Collaborating with local distributors, sales representatives, or consultants in the firm's local target markets. These partners can provide valuable insights into local market dynamics, cultural nuances, and regulatory requirements.
2. **Adapt Your Sales Approach to Local Cultures:** Tailoring the firm's sales pitch, messaging, and negotiation style to align with the cultural norms and preferences of the international clients demonstrates an understanding of their business challenges and priorities.
3. **Utilize Translation Services for Effective Communication:** Ensuring all marketing materials, presentations, and contracts are translated accurately into the language of the firm's target clients enhances understanding and builds trust.
4. **Comply with International Trade Regulations:** Familiarizing the key personnel of the firm with the import/export regulations, customs procedures, and taxation policies of the

- countries the firm is targeting will require the engagement of appropriate legal counsel.
5. Embrace Cultural Sensitivity and Respect: Demonstrating cultural sensitivity and respect in all interactions with international clients helps avoid making assumptions or generalizations based on stereotypes.
 6. Seek Feedback and Engage in Dialogue: Being open to feedback from people from different cultures about the firm's cultural sensitivity leads to respectful dialogues and the understanding of diverse perspectives, This, in turn, leads to ongoing learning and improvement, eventually reducing the negative effects of cultural biases.
 7. Continuously Adapt and Evolve: Staying abreast of emerging trends, technologies, and market conditions in targeted international target markets will help the firm to adapt its sales strategies and approaches as needed to remain competitive and successful.

By implementing these strategies, and following this checklist, businesses can effectively conduct international B2B sales without the need for extensive travel.

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Track: B2B/Supply Chain Management/Logistics

ID#: 1790

Inventory Management and Radio Frequency Identification Utilization in Healthcare

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Abstract

RFID technologies in the healthcare industry might be the solution to the changing challenges the industry has had to face recently. Pharmaceutical companies have to deal with international drug requirements and regulations and a complex network of distribution channels. University of Pittsburgh Medical Center (UPMC) (established 1893) and Allegheny Health Network (AHN) (established 1999) have significantly evolved in their supply chain operations and inventory management. This has left the opportunity for them to start a system, and have it advance over time. It started on paper, and as the Internet was created, there were easier methods for inventory control. With new processes come new obstacles, such as supply chain problems and inventory management issues. Supply chain tactics used by both hospitals and provide ways to alleviate some inventory management issues are highlighted. A comparison of the systems as well as an empirical study should provide much needed insights for improvements.

Keywords: Demand Forecasting; Enterprise Resource Planning (ERP); Inventory Management; Healthcare; Online Pharmacies; RFID; Supplier Management.

1.0 INTRODUCTION

Inventory management within the healthcare industry involves the oversight of various inventory, such as medical supplies, medical equipment, patient prescriptions, and health and wellness products. Proper inventory management reduces waste and cost by ensuring that providers have access to the right products at the right time. Demand forecasting, stock control, supplier management, and technology integration are critical aspects of the process (Bhurjee, et al., 2018; Chaturvedi & Chakrabarti, 2018; Gothwal & Raj, 2018; Hossain & Hossain, 2018; Smith, 2023). The fragmentation of the IT infrastructure in the healthcare industry results from the vast number of different products and services involved. Due to the lack of inventory cohesiveness and inherent inaccuracies, costly errors translate into declined efficiency for the entire sector. Manufacturing errors lead to contaminated drugs in the U.S., resulting in illnesses and deaths. Moreover, the problem of counterfeit medication increasingly demands attention (Kim & Bostwick, 2020; Kolodny & Frieden, 2017).

Demand forecasting, another major issue in healthcare organizations to help accurately predict inventory levels, refers to the analysis and application of historical data patterns in order to accurately predict future demand. The goal of stock control is to eliminate shortages and waste. It includes keeping accurate storage levels through knowledge of reorder points and current stock levels. Supplier management is the establishment of relationships with reliable and trusted suppliers that will meet the needs of the company. Pricing negotiations are a key element of supplier management. Finally, technology integration refers to the implementation and application of software systems that allow for process automation. Big data is a part of this as it

is leveraged in the decision-making process (Saha & Ray, 2019).

An important piece of any firm's strategic technology integration is taking advantage of the inherent benefits of RFID adoption. RFID utilizes radio waves to communicate, track, and trace products along the supply chain with the goal of helping to boost efficiency through enhanced data communication, counterfeit reduction, and drug quality insurance. Hence, quality control and counterfeit reduction are key issues that raise the need for new technologies; however, the use of RFID includes further applications that includes blockchain technology that aids in tracking shipments and maintaining proper inventory levels. Chircu, et al, 2024 suggested that RFID can help prevent inventory shrinkage by improving accuracy of inventory and increased information transparency. RFID uses wireless communication between tags and sensors in order to identify and track objects. Barcodes are also a form of technology that provides data to sensors, but are more limited. They are visual representations of data and are leveraged in order to track inventory quickly and accurately. These are used in supply chain management (SCM) across various industries to provide live tracking, increased accuracy, and the automation of the data collection process.

For example, the problem of the competition from generic drugs and the issue of counterfeit drugs must be addressed, and RFID technology is an alternative to solve those issues. Although using barcodes is cheaper and easier to affix to products, they are not tamper-proof, and it is not possible to read them in bulk, which are two advantages of RFID labels. The transition to new technologies will incur costs. However, in the long-run the benefits outweigh the costs and value is being added for all supply chain partners, as well as the end consumer: the patient. Especially the transportation and logistics of temperature sensitive medications can be enhanced by RFID tags when coupled with temperature sensors. Combining RFID with electronic documents (e-pedigree) that summarize data about a drug is useful to all supply chain participants. In the end, it is vital for any organization within any industry to operate as efficiently as possible and to search for new ways on how to add value to its processes. RFID can be the solution.

Purpose of Study

With disruptions such as Covid-19, inventory and SCM-systems in the healthcare industry face a variety of struggles. These struggles can be alleviated, in part, through the implementation and utilization of radio frequency identification and barcode technology throughout the supply chain. Within the healthcare industry in the Pittsburgh area, two standout companies are the University of Pittsburgh Medical Center (UPMC) and Allegheny Health Network (AHN). The ultimate goal of the present study is to analyze how these specific companies manage inventory, what supply chain problems they face, and how RFID, barcode, and other automatic identification and data capture (AIDC) technologies can be used to support inventory management and alleviate current and future supply chain struggles.

In terms of the empirical section of the present study, advancement in technology in supply chains have significantly enabled healthcare delivery systems to greatly improve their efficiencies and effectiveness. In terms of drug fulfilment and its management, especially within the online pharmaceutical industry, a number of hypotheses were developed from a review of the literature.

H1. Significant technological advances have allowed the possibility for increased online order fulfilment in the healthcare industry. Consumer acceptance of online pharmacies would be an extension of that advancement. Gender differences among the basic motivational factors of online pharmacies should be apparent among the various intrinsic and extrinsic concerns for such services.

H2. Increased accessibility and sophistication among the general population, especially younger segments, have made the potential growth of online pharmaceutical services more practical. However, with this growth, there is a growing skepticism that profit, not caring, motives are fueling this expansion.

H3. There are major factors that prevent general acceptance and usage of online pharmacies outside of legal constraints. It is logical to assume that significant differences exist among basic demographics and perceptions that physicians and online pharmacies place the patient's care as the first priority above profits.

CASE STUDIES

In this section, both UPMC and AHN were inspected for best-business practices. Each healthcare institution will begin with an overview/profile of the organization, followed by discussion of their procurement and inventory concerns, supply chain problems, and a general discussion of their RFID implementation issues. In completing the relatively brief descriptions in this best business practices case study, the basic tenants of the qualitative case analysis (Bogdan & Biklen, 1992), with emphasis on the context of each organization were used in the case study portion of this present research effort.

EMPIRICAL SECTION

Sample Selection and Statistical Tools

A series of variables were created via a standardized instrument via online. The questionnaire was derived from the review of the available literature and was designed to augment the present study's case study of technical innovation, especially AIDC and RFID applications. The sample is a well-educated and professionally employed workforce primarily in the Western PA and partially in the NE OH areas. This pool of respondents is part of the researcher's LinkedIn™ and other social media groups of working adults that have attended and/or graduated alumni of several major universities/colleges in this geographic area.

A total of 550 respondents with completed surveys were used for the analysis portion. In terms of demographics, there were a relatively equal representation in terms of gender (male, n = 280, 50.9%; female, n = 270, 49.1%) and dominantly younger (years old) (18-14, n = 300, 54.5%; 25-34, n = 210, 38.2%; 34-44, n = 20, 3.8%; 45+, n = 20, 3.6%). As for the scaled variables. Table 1 summarizes their distributions via basic descriptive statistics. There are a number of categorical variables that will be analyzed via relationship maps and/or Chi-square techniques, so their frequency distributions will not be discussed in this section. The hypothesis-testing sections will give a detailed dive into their distributions.

MANAGERIAL IMPLICATIONS

The two major healthcare organizations studies in this research effort, UPMC and AHN, face

similar challenges since they are in the same area, but they handle their challenges differently. One major issue that is seen with inventory management is being over or under-stocked on products. This is especially true in healthcare because there is no way to predict trends or forecast when products will be used. UPMC personnel use historical data to input a forecast and then go back to make changes as needed. Whether that is increasing, or decreasing a forecast, it does not seem to be applicable. AHN uses a software called Kinsa, which is able to monitor spikes and dips in market demand. However, still not extremely accurate, but forecasting the unpredictable and uncertain future based on historical data has its inherent limits.

UPMC and AHN both take significant strides to weed out suppliers who would not fit into the mission of the organization. UPMC closely inspects supplier candidates to find ones with similar sustainability goals. Allegheny Health Network does not emphasize this sustainability but still maintains strict standards for suppliers. This ensures relationships are established with trustable vendors who are responsible for the flow of materials in a timely fashion. By ensuring stability and trust in supply chain relationships, disruption effects are mitigated, and innovation is fostered.

As for the empirical portion dealing with the potential growth of online pharmacies, much of efficiencies associated with supply chain networks have a foundation in the accessibility and sophistication of RFID and other AIDC-related technologies. Drug management has been highly automated. However, especially with the recent opioid endemics and Covid-19 pandemics, there is much misinformation and disinformation concerning the degree of honesty of prescribing physicians and the motives of online pharmacies. The results of the hypothesis-testing procedures have provided empirical evidence that much work needs to be completed to repair healthcare institutions' reputation that has been scarred by recent healthcare crises. Undoubtedly, increased automation through the continued development and employment of RFID, digital twins, and other AIDC technological advances in SCM will prove invaluable to control spiraling costs and accuracy in the healthcare field.

GENERAL CONCLUSION

Compared to the alternative of using barcodes, RFID has multiple advantages, which include enhanced traceability and transparency that result in increased operational efficiency. Moreover, the exchange of data, access to real-time information, and "external and internal coordination of material flows" (Chircu, et al., 2014, p.738), which are key factors to improved efficiency within the supply chain. The collaboration of the manufacturer, wholesaler, pharmacies, and hospitals adds value to the supply chain by reducing errors, and as a result, costs are also lowered. Undoubtedly, the use of RFID technology in the healthcare industry is not limited to managing supply chains. In hospitals, RFID can be utilized to manage medication and materials for complex procedures that previously were time consuming and subject to human mismatching errors. Healthcare institutions can leverage RFID readers to access information about medications that can be displayed conveniently on a computer screen. This technology leads to a more efficient labor allocation, which again, translates to cost reductions.

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Track: B2B/Supply Chair Management/Logistics

ID#: 1748

Smart Compassion: Engaging Donors with Virtual Reality to Donating Cash for Disaster Relief

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Abstract

Unsolicited material donations to international disaster relief operations are considered a second tier disaster by humanitarian workers, due to its negative impact on logistics, transportation, environment, sanitation, and morale. We develop a simulated disaster relief donation experience in various media (2D, 3D, and VR) intended to educate the public on this issue, and observe the relationship of the media's degree of immersion, sense of presence, engagement, locus of control, and intention to give cash instead of unsolicited materials. We also apply videogame elements to the experience, to examine the effect of gamification in such interaction.

Keywords: Humanitarian Logistics, Virtual Reality, Gamification.

Track: B2B/Supply Chair Management/Logistics

ID#: 1774

The impact of the Covid-19 Pandemic on the US Logistics Industry

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Abstract

The Covid-19 pandemic of 2020 – 2023 caused a major disruption to the global economy and dramatic supply chain issues ranging from shortages of toilet paper to a semiconductor shortage causing auto manufactures to halt production. This exploratory analysis examines the impact of this pandemic on the US logistics providers by looking at the revenue and profitability of the publicly traded logistics and transportation companies operating within the United States. Initial analysis indicates that there were improvements in profitability for most publicly traded logistics providers from 2020 through 2022 followed by a large decline in profitability in 2023.

Track: B2B/Supply Chain Management/Logistics
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Global Apparel Companies Adjusting their Supply Chain Strategies to Post-COVID-19

BEST PAPER IN TRACK

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Abstract

This research effort examined two retail companies, American Eagle and Duluth Trading Company, with two unique approaches to their supply chain management models. A consumer survey and analysis associated with the apparel industry in the same area (NS Ohio and Western PA) was completed. While the approaches may be different, similarities are shared between the two companies in relation to their supply chain automatization. Optimizing technology and automating processes while delivering resources and materials to supply final goods to its customers is a top priority. The competitive and demographic threats that these two companies are facing as they continue to find a sustainable model competing with other top-technological performers in the retail industry are real and compelling. The companies have gone through COVID-19 and have had to review processes in place to be able to overcome business closures and shutdowns.

Keywords: Apparel Industry; Covid-19; INCOTERMS; Next-Day Delivery; Omnichannel; Supply Chain Management (SCM).

INTRODUCTION

Competition is particularly fierce in the apparel industry as there are numerous options available to consumers. It is one of the few industries where prices did not surge due the Covid-19 pandemic (Polyviou, 2023; Tesarova & Krizanova, 2003). With most companies having online sites, consumers can easily compare prices, shipping times, return policies, etc., to make a quick and informed decision about their planned purchases (Jin & Park, 2006). These issues of retail quality, satisfaction, and trust in the online loyalty development process are especially important to customer-based perceptions in an e-commerce environment (Kamalul, et al., 2018; Kim, et al., 2004; Kim, et al., 2009). One of the major issues many apparel companies are facing today, including American Eagle (AE) and Duluth Trading Company (showcased in the present study), is staying relevant in the shadow of behemoths such as Amazon. Amazon's next-day delivery for most of their products is setting the bar high for companies who wish to grab some of their market share. It is forcing these companies to analyze their supply chain systems to increase their delivery speed and agility to meet the demands of customers.

It is imperative to acknowledge that whenever time progresses, customers' expectations also progresses and changes, especially when dealing with fashions. The fashion industry has responded with fast fashions, which is characterized by fast to market, with little emphasis on quality, durability, and sustainability (Rauturier, 2020; Silva & Bonetti, 2021; Stanton, 2019). Technological advances can be used to optimize the supply chain networks through enhancements they have to offer the company and its customers. Increasing technology can

range from automating processes, RFID, Buy online, Pickup In-Store, warehouse hand and finger scanners, or the use of artificial intelligence (AI) (Moshood, et al., 2023; Singh, et al., 2023; Zaheri & Rafiee, 2023). The major blocking issue, however, occurs when companies decide not to adapt with the technology trends around them or do not come out with new technology enhancements themselves (Silva & Bonetti, 2021).

American Eagle struggles with this by being able to accurately predict trends within their market, then being able to produce the amount of inventory needed. With the improvement of technology, however, American Eagle can conquer this issue within their business and improve supply chain systems. Duluth Trading struggles with technology advancement within their warehouses and has to look for other ways to be able to deliver to their customers when they do not have the resources the other major companies do with technology advancements. If Duluth Trading can optimize their current technology to better serve their customers, not only will they be able to create additional revenue, but they strive to be able to better serve their customers. Staying up to date with the increasing amount of technology is going to be critical for the success of both companies' survival.

Purpose of Study

The basic purpose of the present study is to examine how the clothing industry has responded to the new realities of the post-Covid-19 era from a logistical perspective (assuming we are in such an era). The impact of the pandemic was truly global in the apparel industry (*Edirisinghe, et al., 2022; Rajapakshe, et al., 2023*). As noted by Brydges, et al. (2021), the Australian **fashion industry** was especially hit hard by the pandemic. They used a path-dependency framework to get a better grip on the evaluation of the Australian **fashion industry** and **COVID-19's impact, which was a significant** external shock to the apparel industry's evolution. In general, at the global level, many apparel factories were temporarily closed during the pandemic and switched to smaller factories and/or home-based businesses as alternatives to carry out their supply chain activities. Typically, such alternatives resulted in significantly increased transportation costs. Not surprisingly, strategic sustainability initiatives were significantly impaired as well. *Edirisinghe, et al. (2022) found that although there were very aggressive cost-reduction strategies by many companies in the apparel industry, there were few significant impacts on business sustainability, at least in Sri Lanka.* However, it may be that it was challenging for apparel companies to run a sustainable model at the initial pandemic stage. Hence, there may be a general lack of an effective sustainability program to begin with some apparel companies.

RESULTS

Descriptive statistics

The total sample of usable and complete questionnaires was 615. It seems that the vast majority of respondents watched 10 hours of TV per day (n = 585, 95.1%), with 5 or less the most common (n = 450, 73.2%). In terms of commercials watched on a daily basis, it typically follows the statistics associated with viewing TV (n = 580, 78% watched 10 or less commercials per day). It is still quite impressive in the age of smartphones and the popularity of social media. The effectiveness of these commercials is equally impressive as the advertising nostalgic sports apparel promotes purchases of those items, with the vast majority of respondents were skewed

towards its positive influence (disagree, n = 180, 29.3%; agree, n = 335, 54.3%). As illustrated in Table 1.4, post-COVID influences are apparent as the majority would pay US\$100 or less (n = 550, 89.4%), with US\$50 or less the largest group (n = 320, 52.0%) for a retro, throwback, or old school jersey. It is obvious that nostalgic sports apparel options are still popular fashion accessories.

MANAGERIAL IMPLICATIONS

Managerial techniques can be affected by many factors associated with a business enterprise. When making supply chain decisions, management needs to consider how they will affect the business and their customers. By analyzing these, companies can better understand what strategies to implement while also analyzing how to mitigate risks. Creating policies and procedures are unique to an individual company and what goals they are trying to achieve, as well as what risks they are trying to mitigate. These can be picking whether a global SCM system or a domestic supply chain management system is best, increasing automation within the supply chain, keeping up with technology advancements, and/or acquiring new vendors as needed. With multiple options of products within a supply chain foundation, it is important for businesses to understand the opportunities and risks associated with each decision.

CONCLUSIONS

In retrospect, there is not one dominant solution that will be a one size fits all for every single company even if in the same industry. These two companies have very different strategies but align with the same goals of meeting the customers' demands. While there are the same philosophies that both companies follow, they could be institutionalized differently and tailored to the individual company. Therefore, market research is critical for the success of supply chain management operations as it sparks new ideas and new incentives that companies can use and tailor to fit the needs of their operational standards. For example, management at AE decided to go with a global supply chain operation where Duluth decided to stay with a domestic approach. Neither of these options were incorrect but still had the same exact goal of meeting the customer's needs with production.

In terms of the empirical portion of the present study, both specific-research hypotheses were found to be highly significant. The exposure to commercials has increased as well across the demographics of gender, age, education levels to reinforce an e-tailers' opportunity in any retail industry to increase their products' awareness as the number of hours on a daily basis has dramatically increased since the pandemic, especially for the younger and less disposable income groups. As previously noticed, a greater portion of females than their male counterparts strongly disagreed with the effectiveness of apparel advertising promoting their purchase. However, the vast majority of respondents agreed that advertising is part of their reason for purchase. In general, the Covid-19 pandemic has really shaped how the SCM operations are going to be moving forward. Apparel companies are placing significant strategic and tactical efforts into having more safeguard options into their approach and realizing that there are multiple ways to do these initiatives. While the approaches to the supply chain issues may be different, the end goal is the same for the two Campines showcased in the present study in that they want and strive to increase revenue, while being a top performer for their customers.

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Examining Digital Transformation in Maritime Logistics: A Big Data Perspective

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Abstract

This paper provides an overview of past, present, and future of digital transformation in maritime logistics from a big data perspective. MacInnis (2011)'s method was implemented via systemic literature review on the 159 journal articles published in 2015-2023. Data analysis revealed the publication trend as well as most influential papers and journals. Keyword co-occurrence, co-citation, bibliographic coupling, and Theory-Context-Characteristics-Methodology helps understand the evolving scholarship in the intersection of digital transformation and maritime logistics.

Keywords: Big Data, Digital Transformation, Maritime Logistics, Business Model innovation

Relevance to Marketing Educators, Researchers and/or Practitioners: The systemic literature review on emerging technologies may help educators, researchers, and practitioners familiarize the essentials of domain knowledge by assessing the past, present, and future scholarship.

Introduction

This paper explores the intersection of maritime logistics and digital transformation through the lens of big data. Big data for maritime logistics is central to analyze the flow of knowledge, service, and goods, connecting smart and green ports and shipping for operational and strategic initiatives (Hussein and Song 2022). The past, present, and future of the scholarship will be examined to enhance our knowledge about the usage of big data in maritime logistics with MacInnis (2011) method of Envisioning, Explicating, Relating, and Debating.

Literature Review

MacInnis (2011) method for systemic literature review

MacInnis (2011) suggests a method called "Envisioning, Explicating, Relating, and Debating" to help achieve the goal of educating business students about emerging technologies. Each phase of this method serves a specific purpose. The Envisioning phase helps students conceptualize technologies, the Explicating phase helps them summarize their findings, the Relating phase helps them synthesize different perspectives, and the Debating phase helps them critically evaluate the scholarship overview.

Methodology

The systemic literature review (Zupic and Čater, 2015) has been conducted through the five-phase process: study design, data collection, data analysis, data visualization, and interpretation.

With the Scopus database, the keywords of “maritime*” and “big data” were chosen to gather 159 journal articles published in 2015-2023. Data analysis was conducted to examine the publication trend as well as most influential papers and journals. Keyword co-occurrence, co-citation, bibliographic coupling, and Theory-Context-Characteristics-Methodology (TCCM) framework were implemented to visualize the data as recommended in Donthu et al. (2021) and Bhukya and Paul (2023).

Findings

The publication count has increased as the pandemic has raised awareness of global grand challenges, such as climate change, international conflicts, and rising fuel costs. Keyword co-occurrence analysis and co-citation analysis revealed five (AIS, navigation safety, machine learning, industry 4.0., and smart port) and four clusters (dynamic simulation, vessel trajectory discovery, vessel route optimization, and traffic safety), respectively. The former is backward-looking, but the latter is forward-looking, which complements our understanding of the scholarship. The TCCM framework helps gain insights on research agenda as it provides an opportunity for review and synthesis on the past and present of the evolving scholarship.

Discussion

The results found that big data for maritime logistics is central for predicting, classifying, optimizing, clustering, and monitoring a variety of factors that impact capacity utilization. This includes analyzing data on drivers such as fuel prices, labor costs, capital stock, current events, and weather patterns. By leveraging big data, it is possible to develop solutions that can help address challenges related to engineering, environment, economy, politics, and logistics. Particularly, Automatic Identification System (AIS) (Yang et al., 2019) and Internet of Things (IoT) (He et al., 2018) would bring significant benefits to various stakeholders for enhancing productivity, sustainability, and efficiency. This digital transformation in maritime logistics may lead to business model innovation (Foss and Saebi, 2017) to reshape value configuration mechanisms by redesigning micro-, meso-, and macro-level interactions.

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Controversy Associated with Red-Light Traffic Cameras

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Abstract

Red-light traffic enforcement cameras have become an important topic associated with public safety as proven speed-control devices that reduce traffic accidents. Unfortunately, much public opinion of the red-light traffic cameras delves into concerns with the avoidance of driving behaviors and conspiracy/privacy issues. A relatively large sample ($n = 2,312$), primarily well-educated, younger drivers from the Western PA and NE Ohio was analyzed through graphical and multivariate statistical analyses, testing two major hypotheses derived mainly from an application of Theory of Avoidance Behavior (ToAB) in regard to red-light cameras. Perceptions, from the viewpoints of the males and females, concerning benefits and nuisance factors found strong almost universal support for its safety and purpose, but many disagree on many intrinsic and extrinsic behaviors. There was equal universal agreement on the systemic failure of both private and public drivers' education/training on the subject of speed-control devices.

Keywords: Gratification, Public Safety, Red-Light Cameras, Speed-Control Devices, Theory Of Avoidance Behavior (Toab), Traffic Accidents, Turnabouts.

INTRODUCTION

Traffic Cameras: Public Safety or Menace?

Traditionally, traffic cameras and other speed-control devices are used to create safer intersections throughout the country, but many believe they are a danger to society and are only in place for financial gain. This project aims to discover the public opinion of the privacy and safety concerns of red-light traffic cameras. For example, automotive manufactures are now offering optional features and service contracts to create an early alert systems to help drivers learn about potential speed traps and/or the use of traffic monitoring, speed control devices, such as red-light traffic cameras. According to Karkaria (2020), BMW is currently offering an early-warning system that is designed to allow their drivers to detect the presence of speed control devices, such as red-light cameras on their intended routes. This optional feature is essentially an automated version of a service offered by the Google-owned Waze navigation app. The Google app is based on a compilation of self-reported speed traps and related location of traffic control devices, especially the presence of red-light cameras. BMW's red-light traffic information service is not based on a crowd-based database. Instead, it is based on a nationwide network of public fixed and/or mobile red-light camera locations. This database network when combined with radar and laser detectors, in theory, should allow the subscription system to drivers in real time through their in-dash display module.

Hence, red-light cameras can be seen in a possible light, but it is more commonly cited as a source of frustration by many drivers (Chin, 1989; Clark, 2013; Rocchi & Hemsing, 1999; South, et al., 1988). If traffic safety and prevention of traffic-related injuries a true benefit of society (Aung, et al., 2018, Dias, et al., 2023; Thapa, et al., 2022), there should be near universal

acceptance of such traffic-speed control if it in the best interests of both drivers and pedestrians alike). These concepts will be explored in considerable detail in the current research effort.

Purpose of the Study

The following research effort will delve into the opinions and experiences of individuals in respect to red light traffic cameras. These experiences include but are not limited to: accidents involving traffic cameras, citations issued due to traffic cameras, court appeals of citations verified through the use of a camera, and opinions of financial/revenue gain associated with the use of traffic-control cameras. Through statistical methods and the creation of two specific research hypotheses formulated from an application of the Theory of Avoidance Behavior (ToAB), insights into perception of the ultimate benefit of speed-control devices should prove interesting, especially to professionals dealing with traffic flow and safety. In general, most motorists do not like being monitored and especially do not like receiving fines and increased insurance costs that, as perceived from their viewpoint, are unnecessary. An application of ToAB (Liang & Xue, 2009; Masterson & Crawford, 1982) essentially suggests that people would prefer during avoidance activities (minimizing from red-light cameras' monitoring) learning subjects develop two R-O expectancies. These expectancies are that no punishment will occur if they avoid the task, and if they do not avoid the task, punishment will occur. Obviously, punishment in this case may be a traffic violation, traffic accident, red-light running behaviors, to mention a few. Drivers are motivated to either follow the speed-control and receive no punishment or try to speed up and try to beat the device, hoping to avoid punishment. By researching these hypotheses based on ToAB, greater insight to the controversial implementation of such speed-control devices from an avoidance response perspective. Assessing the perceived pros and cons of red-light traffic cameras in terms of safety intersecting with public trust of the institutions that promote its use.

BACKGROUND

Emergence of Red-light Cameras

Red-light traffic enforcement cameras are used for enforcing traffic laws by capturing an image of a car and its license plate passing illegally through a red light. The picture is then sent to local police enforcement, and if a violation is apparent, a citation is then sent out to the owner of the car. These systems have been developed and put to use in a variety of traffic settings (Fleck & Smith, 1999; Passetti, 1997). Ruby and Hobeika (2003) performed a cost/benefit assessment of the automated enforcement program in Fairfax County based on the analytics of the reduction in vehicular accidents and their severities. Interestingly, the authors found that once the cost savings were computed, the projected savings of the red-light cameras program resulted in a total savings from reduction of accidents to be approximately US\$24.1 million. When compared to the estimated automated enforcement initial costs of US\$15.4 million, a net savings was projected at about US\$8.75 million over its 8-year life cycle.

Red-light traffic cameras have been placed in intersections all over the world (i.e., Australia, New Zealand, Canada, Singapore, as well as in the U.S) (Hillier, et al., 1993; Keating, 2014; Fleck & Smith, 1999; South, et al., 1988). Their intended purpose is to capture evidence in the form of a photo that can be used to identify drivers that violate local municipalities and state traffic laws. By doing this, the cameras help law enforcement crack down on those who run red

lights. The photos are automatically taken by the cameras then analyzed by law enforcement. If it is found that the driver violated a law, the license plate number is used to find the driver's information and a citation is mailed to the driver's house. Many people speculate that the main reason for these red-light cameras is to generate revenue from the citations issued. Many people are concerned that these traffic cameras actually cause rear end collisions due to people making sudden stops to avoid running a red traffic light (Retting, Ulmer, & Williams, 1999; Zaal, 1997).

Red-light cameras were first invented in the Netherlands during the 1960s. Israel started use of these in 1969 to enforce traffic laws. The U.S. did not begin using red-light cameras until 1982 when a driver ran a red light and collided with an infant in a stroller. This incident was highly publicized and drew attention to the use of red-light cameras (Retting, et al., 1999a, 1999b). In 1993, New York City's red-light camera program went into effect. Before December 2000, most of these cameras used film, but digital cameras are replacing these film cameras. In the United States, red light cameras are only used in 26 states. While some states elect to use them, other states such as Arkansas, Maine, Mississippi, Michigan, Montana, Nevada, New Hampshire, and West Virginia have all prohibited the use of red-light cameras. Since being installed, many towns have elected to quit using their red-light cameras. In February 2013, the mayor of San Diego actually personally removed a red-light camera to honor his campaign promise of eliminating them once elected. In some states it's required that in addition to the driver's car, their face must also be included in the picture to prove that it was indeed the owner of the car who was driving the car in question at the time (Clark, 2013). In many areas, private companies run red light cameras. Many lawsuits have been filed concerning that a private company is issuing citations to citizens. There are many instances that the cameras themselves are flawed. In California alone, 7,603 tickets were refunded due to flaws in the red-light camera systems.

In retrospect, red-light traffic cameras can literally be a significant force for measuring safety statistics and public trust of the communities' governance that employs them. Collectively, red-light traffic cameras could potentially be a key component to creating more safety and awareness on the road. One of the reasons for installing red light traffic cameras is to reduce the frequency and the severity of certain types of crashes, especially right-angle collisions. Unfortunately, there are drivers that speed up and instantly push down on the gas pedal to prevent stopping at a red-light traffic device. Obviously, there are moderating variables that may directly or indirectly affect drivers' perception in terms of safety and potential enforcement of traffic laws as one travels from one location to another (e.g., city, suburban, rural). Or it can be at an intersection that indicates that a driver may have an opportunity to make a right turn on red. If the other driver is forcing themselves to avoid the red light, which then means they may have surpassed the speed limit, and it can cause an unexpected collision if a driver looking to make a right turn is not aware of the other drivers' intensive speed increase. Despite progress in so many other areas of highway safety, speeding remains a significant highway safety challenge. Speeding-related fatalities continue to be a serious highway safety problem, accounting for roughly a third of all traffic fatalities. Speed cameras have become more prevalent as a way to address the problem of collisions and accidents. Ultimately, do these speed-control devices are perceived by drivers as benefits or nuisances? Will they obey and respect the intended purpose or treat them as objects to avoid, either by red-light running or speeding in the area of an intersection slowing down (with the intention of avoiding a traffic violation). It is in the best interest of society to create more safety-minded and educated drivers and, ultimately, to overturn the mindset of drivers who

embrace speeding (Ogden, 1996).

In theory, law enforcement officers initiate effective enforcement actions; ideally on the days and at the times and locations that these violations historically have transpired, to increase red-light compliance and thereby reduce the needless deaths and injuries that are produced from collisions at intersections. Realistically, however, officers are unable to undertake traffic enforcement as often as they wish because of competing demands and ever-growing workloads at a time when their agencies' authorized strengths and budgets are dwindling. Even when officers are able to enforce against red-light violations, their efforts often add to existing congestion and lead to frustration when these officers cannot safely apprehend violators or even stop their vehicles on shoulders that are sufficiently wide. That is why it was felt so important to educate drivers on the importance of red-light cameras, and how they can have a tremendously positive impact on day-to-day transportation. Most drivers obey traffic signals all the time. However, some drivers, due to temporary inattention, distractions, poor decision-making, or aggressive driving fail to stop for red lights. Those red-light violating drivers create crash opportunities at the conflict locations. Traffic engineers seek ways to increase compliance with traffic signals at locations where red light running is higher than normal. Sometimes engineering countermeasures can be used, such as changing signal phasing or timing or modifying signal displays. However, often the problem is driver decision-making, and enforcement becomes necessary. The traditional method of enforcement is for police officers to cite violators they observe. This requires police officers to spend their time on the streets, and results in an occasional enforcement presence. It also requires police officer time away from other duties. It should be noted that, unless otherwise stated, the authors of this summary drew the information from published or Internet summaries and did not have access to the actual data. It should also be noted that many results are based on observations of small numbers of intersections for varying periods and that the intersections may have been selected for red light camera application based on a variety of existing conditions. Therefore, readers are encouraged to consider general trends and consistency rather than to try to calculate average magnitudes of effectiveness.

RESULTS

Descriptive Statistics

Analysis of the sample and statistical evaluations that will aid in the formal testing of several assumptions regarding the acceptability and use of red-light cameras in a community concerned either with safety or lack of public trust issues can be found in a preliminary inspection of descriptive statistics, selected frequencies, and graphical displays. A total of 2,312 completed surveys were used in this research effort. Looking at the basic demographics, the respondents were majority male ($n = 899$ out of 1,450, 62.0%), relatively well educated with at least an associate's degree ($n = 1,104$, 74%), and representative of relatively older age ranges [(28-27, 30.0%; 38-45, 38.0%; 46-52, 24.0 %; and 53-70, 6%)].

MANAGERIAL IMPLICATIONS

Based on the formal testing of H1-H2, there is ample evidence that drivers that are aware of red-light traffic cameras and its location affects their perception of safety and privacy concerns. People with greater levels of formal education are less likely to agree that such speed-control devices are beneficial to society. However, there is general agreement among the genders that

such devices promote higher levels of safety and their physical presence/location can have a significant benefit to its use. However, most of the other factors or constructs have an opposite effect on driving behaviors among both genders. Many respondents still perceive such devices as a nuisance and a distraction. As previously researched, in some stances, the impact of their presence has an inverse impact than originally designed (Buono, 2023; Chen, et al., 2017; Mohammed, et al., 2019; Roland, et al., 2021; Sun, et al., 2018). As presently referred to as red-light running (Chin, 1989) or evidence behavior that is predictable from an application of the Theory of Avoidance Behavior (ToAB).

CONCLUSIONS

As found in the current study, the sheer fact that drivers simply being aware of red-light traffic enforcement cameras does not necessarily directly affect their perceptions of safety and privacy perceptions. However, their existence and purpose appear to be strong, but it does not positively reduce their nuisance value. It is evident that drivers' education programs, but public and private, are not adequately providing the necessary information that the designers of such speed-control devices and community planners had hoped for. There are statistically significant relationships that were found in the testing of the specific-research hypotheses about avoidance behaviors associated with drivers' perceptions concerning safety and privacy issues associated with the implementation of red-light traffic cameras. Probably, some of these apprehensions would be relieved if they were properly educated on the potential benefits and possible disadvantages of the enforcement cameras. Obviously, the research results suggest that not enough opportunity exists in drivers' education instruction, if any, about such speed-control devices. As most respondents have some knowledge of the cameras, it appears that most are not properly educated on how they work and what their intended functions may be. Perhaps, the same can be made for the global growth of traffic roundabouts or circles. But that would be an interesting study for future research. Unfortunately, not having sufficient knowledge of such speed-control devices on a deeper level may lead to misconceptions and misjudgments of the red-light traffic enforcement cameras.

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Track: Case Studies
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Gentrification, Poverty, And Investors' Influence on Vulnerable Populations: A Market Perspective Case Study

BEST PAPER IN TRACK

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Abstract

This case study examined public quantitative data to determine if gentrification was occurring in under-resourced areas of the Metro Atlanta, Georgia, area. The study area's population consists of a primarily elderly, impoverished population in a large metropolitan city in Georgia. The case study was conducted based on concerns from a nonprofit organization's leadership that unethical salespeople were preying on the area's under-resourced population, enticing residents to give up their family homes for values significantly below market value. A team of academic researchers consisting of two marketing professors, a geography professor specializing in Geographic Information Systems (GIS), an MBA graduate student, and three undergraduate research teams designed the study and used a multiple data collection approach to collect data from various government databases. The case study findings showed that although gentrification might have occurred, it did not directly result from unethical or manipulative marketing practices. Other possible causes were identified. Research limitations occurred as the researchers could not interview residents to gain their stories. This study is valuable as it demonstrates the value of scientific research on critical societal issues and provides helpful information for practitioners so that resources can be directed appropriately.

Keywords: Sales, Investment, Societal Marketing, Research, Descriptive Case Study

Relevance to Marketing Educators, Researchers and/or Practitioners - This case study contributes to nonprofit practitioners by demonstrating the value of research in examining data to determine or eliminate the causes of a problem. By doing so, nonprofit organizations can create and use the appropriate marketing techniques and deliverables to address concerns.

Introduction

This descriptive case study consists of multiple cases selected to identify reasons for a sizeable increase in sales below market value in a section of Atlanta, Georgia, where most under-resourced residents live. The study examined the research question as to was gentrification occurring from predatory sales practices by investment companies in the subject Neighborhood Planning Units (NPU). The case study was longitudinal across four years of quantitative government data. This case study investigated factors influencing ownership and sales within the subject NPUs in the South-Central Metro-Atlanta, Georgia, area to determine what factors

influenced residents to sell below market value. By understanding the facts, appropriate marketing interventions could be produced.

For this study, gentrification is defined as “a process in which a poor area within a city experiences an influx of middle-class or wealthy people who renovate and rebuild homes and businesses, which often results in an increase in property values and the displacement of earlier, usually poorer residents” (Merriam-Webster, 2024). The client for this research study suspected that predatory investment companies were influencing gentrification and that their actions resulted in real estate activity that negatively affected under-resourced residents. Subject under-resourced residential areas included characteristics of but are not limited to aging residents who are financially challenged residents, United States veterans, and residents with disabilities. Many factors influence gentrification activity, including the age of homes, homeowners, and the economy (Kennedy and Leonard, 2001). Many residents in this study own generational homes built between 1920 and the 1960s. The subject population for this study is predominantly older and under-resourced. Most of the world’s population consists of Baby Boomers (i.e., born between 1946 and 1964). This large population, many of which are under-resourced (i.e., having insufficient resources for a quality of life) in the United States (US), faces an economy that restricts their movement and threatens to force them into uncomfortable and potentially less-than-desirable living situations. This is a grave issue, particularly for approximately 23% of Americans over the age of 65 who live at or below the poverty level (Iacurci, 2023). This study defines poverty as “the state or condition in which a person or community lacks the financial resources and essentials for a minimum standard of living” (Emerald Publishing, 2024). According to DeVise (2023) of *The Hill*, nearly half of Baby Boomers have no retirement savings; thus, their family home may be their only significant asset. The lure of considerable cash for homes bought decades ago for home which may need costly repairs or upgrades may entice homeowners to sell. In the case of this study’s population, environmental factors such as living in flood zones and external factors such as receiving warnings and fines for code enforcement violations (Atlanta Police Department, 2024b) that may or may not be violations or even be within the residents’ control may also influence the selling decision. Properties identified for this study are frequently subjected to submission of real or fake code enforcement violations submitted by anyone, including but not limited to an angry neighbor or a company that wants the property to resell or build a new structure (Atlanta Police Department, 2024a). The nonprofit organization for this study shared knowledge that many of the residents in the NPUs do not have the resources to research moving costs and the changes that the move will necessitate. Selling may necessitate residents moving far from their neighborhood to afford another residence in the Atlanta area (median home price \$268 per square foot) (Realtor.com, 2024), possible loss of conveniences such as bus transportation, neighborhood stores, and potential separation from lifelong friends or family.

This study was built on a foundation of relevant research, data, and theoretical and conceptual underpinnings. It begins with a literature review, followed by the methodology, findings, conclusions, and recommendations for future research sections.

Literature Review

Case studies are the best research method to investigate phenomena too complex for other methodologies. The current study consists of multiple data sources with the potential to

overwhelm other types of analyses. As purported by Yin (1981), the theory is essential for descriptive case studies. This descriptive case study is couched within two theories: 1) exchange theory and 2) the theory of self-perception, to define a complete and appropriate description of influences on the sale at under-market prices of study subject's residents' generational homes.

The subject nonprofit organization's leadership perceived gentrification, not revitalization, might be occurring within the subject area. According to Kennedy and Leonard (2001), the flip side to revitalization is gentrification. Although gentrification positively affects long-distressed communities, it also has adverse effects (e.g., rent increases and displacement of families). The term "gentrification" has incited polarization and is seen as counterproductive. Residents, city officials, and other interested parties often spiral into rhetorical attacks and factional fighting (Kennedy and Leonard, 2001).

Nonprofit organizations, such as the subject organization, engage in social marketing. "Social marketing is based on the exchange theory, which assumes that humans are needs-directed beings inclined to try to improve" (Rickard and Sams, 2023, p. 60). Social marketing bridges the gap between public welfare and the corporate sector. Social marketing is where marketers attempt to "transform habits and attitudes from a perceived negative to a more positive one" (Ada 2017, np). However, social marketing products must be created and delivered based on the facts of a problem, not symptoms of the problem, and not on selective perceptions. Social marketing campaigns serve a significant need for the public (e.g., information and resources for health, safety, social justice, etc.). Yet, to increase the readiness of their clients to change, social marketers must provide a beneficial product in exchange (Hastings and Saren, 2003).

The subject nonprofit organization champions residents' overall well-being. In this study, the nonprofit organization leadership consumed the beliefs and attitudes of the under-resourced population of Metro Atlanta for years. It may or may not have become subjected to others' selective perceptions. Selective perception refers to how individuals filter information based on their interests, background, and experiences (Bruner and Postman, 1949). Consumers tend to notice and retain information that aligns with their beliefs and attitudes. Once the organization's leaders learned of several under-resourced residents selling or considering selling their generational homes at under-market value, the client became concerned and asked this research team for help understanding the causes. The organization's leaders wanted to understand the phenomenon because it primarily occurred in under-resourced neighborhoods. Leadership was aware that to address residents' needs adequately, means understanding the problem and not the symptoms of a problem. Once this occurs, it is essential to tailor the organization's messages and/or products to the right target audience and use the appropriate medium to deliver them to the target audience so the message will be noticed and remembered.

Because there was a perception held by the nonprofit leadership that perhaps predatory salespeople representing investors were persuading members of the subject population to sell below market value, research was conducted to avoid jumping to conclusions resulting in the misuse of the organization's marketing efforts by producing the wrong messages for the wrong target market. Salespeople's actions have often been questioned, on whether their motives are to sell genuinely or unethically manipulating a potential customer strictly for the sale. The Federal Trade Commission (FTC) often reports on elderly people being taken advantage of by

businesses. For example, headlines that read “How scammers target older adults using new tech schemes” or “Elderly taken in by sweepstakes scams” are not uncommon (Federal Trade Commission, 2024). According to DeLiema, Yon, and Wilber (2016), their cognitive and decision-making ability decreases as people age, increasing their vulnerability. One sign of cognitive impairment is financial decision-making (Triebel and Marson, 2012). Older adults have a difficult time picking up on “untrustworthy” facial characteristics (Castle et al., 2012), which means they are less able to detect lying (Ruffman et al, 2012), making them more vulnerable to manipulative sales tactics. This fraudulent and manipulative selling to older Americans jeopardizes their economic future. These deceptive practices cost Americans approximately \$50 billion annually (Deevy, Lucich, and Beals, 2012). The nonprofit's concerns about predatory investment practices were warranted. There was a Bill #20-O-1668 proposed by a City Councilmember for the City Council of Atlanta, GA protecting the citizens in four specific neighborhoods from commercial harassment. The bill specifically stated commercial businesses could not "engage in commercial harassment persuade, convince, cajole, pressure, force, harass, or otherwise coerce residents and visitors to the City of Atlanta to engage in commercial activities, including to coerce homeowners into selling their property. Whereas these tactics are so prevalent within the City of Atlanta they have earned nicknames like “driving for dollars” and “dialing for dollars.” This Bill passed during this research project.

Methodology

Data Collection, Analyses, and Findings

To identify and determine differences or similarities in the subject neighborhood property units (NPU) such as residential property cost, zoning changes, and other factors such as code violations, data from 1) nonprofit client records, 2) QPublic, 3) Environmental Systems Research Institute (ESRI), and 4) Geographic Information Systems (GIS) were utilized. Data from these were analyzed using Excel[®] and SPSS27[®]. When additional data were needed to resolve a gap or conflict across data sources, Google Earth was used to view properties in and around the surrounding area to determine their status. All Atlanta, Georgia, NPUs were researched using data from the government sources listed above. Fifteen NPUs (D, G, H, J, L, M, N, O, P, S, T, V, W, X, and Y) to be included in the study identified by the nonprofit were verified by data analyses and included in the study. NPU demographic data were examined to ensure that the NPUs included in the study were those with significant under-resourced residents. Ten NPUs (A, B, C, E, F, I, K, Q, R, and U) were excluded as they did not meet the study criteria. NPU demographics relevant to under-resourced populations were population size, largest age group, gender, race distribution among adult residents, education of adult residents, median household income, and wage earners income \leq \$49,999. Data analyzed using SPSS27(r) examined the means and median of demographic data obtained through QPublic. The analysis showed that demographics across the NPUs included in this study consisted of 1) the elderly was the majority age group, 2) majority female, 3) majority African American, 4) majority education level (little to no college education), 5) median household income (\$19,185-\$39,750), 6) majority living at or below the poverty rate, and 7) majority wage earners income were \leq \$49,999.

Possible Impact Factors: Land and Building Values

To determine whether an NPU should remain in the active investigation set, it was essential to determine if there were significant similarities or differences in residential property land values

across NPUs. Data were collected and analyzed for a four-year period of land and building values using a one-sample t-test per NPU. NPU G contained an outlier in which the percentage value for one piece of land dropped by 450% over the four-year period. NPU, D, had too small of a case weight to calculate statistical significance. The land value for the following NPUs increased slightly less than the overall NPUs' mean percentage increase in land value for NPUs of 69.3569% (n,365).

The following NPUs were statistically different from the mean value (lower than the mean): N ($p < .05$, $t = -4.985$; n,3), P ($p < .001$, $t = -4.259$; n,21), O ($p < .05$, $t = -2.606$; n,12), H ($p < .05$, $t = -2.536$; n,24), and W ($p < .001$, $t = -2.132$; n,17). Thus, the land values were lower than the average across the NPUs in the study. Whereas, the following NPUs were statistically different from the mean (higher than the mean): S ($p < .001$, $t = 27.789$; n,60), M ($p < .05$, $t = 27.115$; n,2), L ($p < .001$, $t = 16.716$; n,6), T ($p < .001$, $t = 10.400$; n,29), X ($p < .001$, $t = 10.762$; n,31), Y ($p < .01$, $t = 4.667$; n,9), V ($p < .01$, $t = 3.712$; n, 18). The percentage increase in NPUs S and M land values grew much higher than the average land value growth rate of 69.3569%. This may be because there are no rivers or creeks, and they are located near large commercial areas.

To determine whether an NPU should remain in the active investigation set, it was essential to determine if there were significant similarities or differences in residential home values across NPUs. The mean percentage increase in building values across all NPUs in this four-year comparison study was 59.4092% (n,365). Data were collected and analyzed for four years using a one-sample t-test per NPU. Based on case weight and the existence of a significant outlier, NPUs D and G were not included in this portion of the analyses. Home values for M, N, P, T, V, W, X, and Y were found to be not statistically different than the mean ($< .05$). However, the home values for the following NPUs increased greater than the overall NPUs' mean percentage increase for NPUs of 59.4092% (n,365). Building values in NPU S decreased. The following NPUs were statistically different from the mean value (higher): H ($p < .001$, $t = 9.645$; n,46), O ($p < .001$, $t = 5.237$; n,13), J ($p < .001$, $t = 5.021$; n,35), K ($p < .001$, $t = 4.316$; n,14), L ($p < .05$, $t = 3.413$; n,6). Building values in NPU S were lower than the mean ($p < .05$, $t = -2.229$; n,58). It should be noted that average land values have increased across four years at a higher average percentage rate (69.5569%) than the building value percentage rate (59.4092%) within the study's NPUs. However, land and home values for the study's NPUs are lower than other parts of metro Atlanta.

Other Land and Building Factors

The following are some factors that may influence the selling decisions of under-resourced residents in the subject NPUs that are common to most of the NPUs in this study. Dramatic changes in income demographics have occurred with a sharp increase in higher-income residents and a dramatic rise in the displacement of low-income residents correlating with the growth of public infrastructure investments. A creek that runs through the NPU suffers from pollution erosion and high bacteria levels from regular stormwater flooding and sewage overflow. Illegal tire dumping, littering, and sewer overflows also contribute to the poor health of the Creek (United States Environmental Protection Agency, 2021). Flooding and pathogens released from these sewer overflows threaten the public health of surrounding communities. A reporter on 11 Alive Television News in Atlanta discussed how a few pop-up showers in late 2020 caused human sewage to flood the area. According to the United State Environmental Protection

Agency (2021), neighborhoods near the flooding suffer from high vacancy rates, neglected properties, low employment opportunities, and insufficient access to public transportation. NPUs with properties located near the river have a 1% annual chance of flooding and a 26% chance over a 30-year mortgage. The City of Atlanta displaced residents from 29 homes to build a water retention pond to fix the flooding issue. Some NPUs have homes built in the 1960s and some as early as the 1920s. Old houses have a much higher risk of fires because many have outdated electrical systems. Many residents within the subject NPUs cannot sell their homes or even live in their basements due to the horrible flooding problem.

Possible Impact Factors – Code Violations

Although the leadership of the nonprofit was concerned that predatory investors were reporting bogus (fake) code violations and putting pressure on under-resourced homeowners to sell their property due to code violations, that was not found to be the case. Bogus (fake) reported code violations on homeowners were a very small percentage and not deemed to be why homeowners sell their homes for under-market value. The following table shows the number of residential units, the total number of reported code violations, and the number of violations that were found to be unfounded (See Table 1).

<i>Table 1: Code Violations</i>					
<i>NPU</i>	<i>Population</i>	<i>Violations</i>	<i>Unfounded Violations</i>	<i>Percentage of Unfounded Violations</i>	<i>Most Reported Code Violation</i>
D	13,802	913	159	17.42%	Trash and Debris
G	9,265	1950	249	12.8%	Trash and Debris
H	14,665	2931	718	25%	Trash and Debris
J	12,513	4311	340	7.9%	Overgrowth
L	6,669	1760	381	21.6%	Trash and Debris
M	32,472	979	235	24%	Trash and Debris
N	22,630	654	241	30%	Overgrowth
O	17,463	1044	108	10.45%	Overgrowth
P	19,828	2064	275	13%	Overgrowth
S	10,762	2709	244	9%	Overgrowth
T	16,616	2288	241	10.5%	Trash and Debris
V	14,198	3037	295	9.7%	Overgrowth
W	19,891	1342	188	14.01%	Overgrowth
X	12,761	3279	300	9.5%	Overgrowth
Y	11,661	1932	239	12.4%	Overgrowth

Conclusions and Recommendations

The data analyses did not clearly indicate why residents were selling below market value. A special note should be included. Several of the sales were classified as “unqualified.” An unqualified sale is a transaction where the property is sold without meeting the typical conditions or qualifications that would make it a fully recognized sale in the market. This could mean that

the sale does not meet the criteria for being considered in market analyses, appraisals, or for tax purposes. Unqualified sales might include non-arms-length transactions (sold to family members), distressed sales (foreclosures or short sales), partial interest (only a portion of the property ownership), and intra-company transfers (sales within the same company) (Appraisal Institute, 2013). The one thing these all have in common is that they do not represent a market value. The research did reveal possible explanations, such as what appears to be significant sums of cash for homes that need extensive repairs for which residents may not have the resources to determine the actual value of their residence or the cost of relocating. Residents of these NPUs are subjected to elements of the natural environment such as flooding, poor infrastructure (e.g., drainage issues), aging homes, lack of funding to fix or upgrade homes, overwhelmed by code violations (actual or not), and lack of resources to fix genuine violations. The residents in the subject NPUs live in poor economic neighborhoods and have significant residents with low education levels. Pressure from the revitalization of these areas may play a role. One constraint of the study was the inability to interview residents.

Although there was no apparent reason for the under-market values of sales, the research teams provided the nonprofit leadership with marketing remedies for issues identified in the study. These marketing remedies were based on demographics, such as lack of internet or cellphone access, inability to travel beyond their neighborhood, low education levels, and an aging population. Remedies included flyers with targeted messages about who to contact before selling, where to get funding or help repairing or upgrading their residences, and/or free legal services.

Future Research

The findings of this descriptive case study provided a robust foundation for future research in several key areas. This section outlines potential directions for further exploration to broaden the understanding of gentrification and intervention strategies. Future research should extend the longitudinal aspect of this study to monitor the ongoing effects of gentrification. Such studies could provide more comprehensive insights into the long-term socio-economic impacts on under-resourced residents, focusing on displacement patterns, changes in community composition, and economic mobility.

Furthermore, a qualitative approach, including in-depth interviews with current and former residents of the NPUs, would provide valuable insights into personal experiences and perceptions of gentrification. This would help to understand the impacts on community ties and residents' sense of identity and belonging. Additionally, given the nonprofit's concern about predatory investment companies, further research should specifically investigate the tactics used and the impact of these businesses on the gentrification process. This could include additional case studies of specific investment firms, additional property transaction records (QPublic) analysis, and interviews with affected residents to uncover unethical practices and potentially propose additional regulatory measures.

Moreover, future research should examine the impact of gentrification on specific demographic groups within the under-resourced populations, such as elderly residents, veterans, and people with disabilities. Understanding the unique challenges these groups of people face could determine the proper support services needed. Another area to research, given the identified

issues of flooding and pollution, should be to investigate gentrification's environmental and health impacts. This includes studying the correlation between environmental hazards and displacement. Lastly, research on the legal and ethical issues surrounding gentrification, specifically regarding property rights, tenant protection, and ethical real estate practices, could help develop a framework for more equitable urban development practices.

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Track: Case Studies
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CONSUMER BEHAVIOR

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Exploring E-waste Recycling Intentions Among College Students in Taiwan and the U.S.

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Extended Abstract

Introduction

Electronic waste (e-waste) poses a significant threat and challenge for environmentally conscious consumers and institutions. In the last few decades, e-waste has seen rapid growth worldwide (Cui and Anderson, 2016). Today e-waste is the world's fastest-growing solid waste stream, growing three times faster than the world's population. According to the World Health Organization while 53.6 million tons of e-waste were produced only 17.4% was recycled in 2023 (World Health Organization, 2023). Disposal of e-waste rather than proper recycling results in high levels of pollution to the environment and human health hazards (Robinson 2009, Song and Li 2014, World Health Organization 18 October 2023).

Clark, Haytko, Hermans and Simmers (2019) point to a global need for understanding consumer decision making for sustainable consumption and recycling behaviors. Thus, this study compares young U.S. and Taiwanese consumers' e-waste recycling behavior related to key variables often found in studies of environmentally positive behavior. E-waste recycling results, social and personal influences and e-waste knowledge of young consumers from two technically advanced but different cultures can provide valuable insight for recycling programming.

Literature Review

The topic of e-waste has received considerable attention in the academic literature over the past several decades. The Puzzo and Prati (2024) meta-analysis of 37 studies exploring psychological factors found a strong relationship between behavioral intentions and e-waste recycling behavior. Their analysis indicated that attitudes, perceived policy effectiveness, and convenience were positively related to intentions to recycle e-waste. For example, the Xiang and Mangmeechai (2023) study of Chinese consumers found that personal values, awareness of consequences, acceptance of responsibility, behavior attitude and control and personal norms could be related to e-waste recycling intentions. The Laeequddin et al (2022) study of mobile phone recycling in India found that awareness, convenience, norms, producer interventions and regulations were associated with intentions for safe disposal of mobile phones. They argue that the importance of social norms and producers offering necessary infrastructure and clear communications are key to mobile phone recycling.

See the Islam et al (2021) content analysis of 109 research papers exploring consumer e-waste behavior for further in-depth analysis of the state of research in the area.

The current study explores young consumers who as major consumers of electronic products,

worldwide contribute significantly to the generation of e-waste (Aboelmaged, 2021). Recent research has begun to explore young people's motivations as they relate to green behaviors (Iman and Steenburg, 2018; Simiyu and Kariuki, 2023) or specifically e-waste recycling behavior (Kumar, 2019).

The Islam, Dias, and Huda (2021) study of young Australian consumers found that awareness programs are essential for proper e-waste recycling. A study of young consumers in northwest China found a high level of environmental consciousness but a low level of awareness of the e-waste recycling availability and regulations. Rather than formally recycling e-waste, the respondents were likelier to stockpile old electronics or sell them to peddlers (Ramzan et al. 2019).

Muralidharan, Rejón-Guardia and Xue (2016) call for more comparative studies to examine the specific green behaviors of recycling by young consumers across cultures. The current study compares a Western and an Asian culture, examining motivational factors influencing e-waste recycling behaviors of young consumers in the U.S. and Taiwan. Cultural differences and legislation can lead to different environmental and recycling behavior among countries (Diamantopoulos et al., 2003; Corral-Verdugo, 2003). Prior research by Blose, Mack, Pitts and Xie (2020) indicates cultural differences between young U.S. and Chinese consumers' recycling behavior. Taiwan and the U.S. provide useful comparisons for the study of e-waste. Taiwan is a major producer of electronic products and components, while the U.S. is the largest consumer of electronic products. Further, the two nations have significant differences in e-waste recycling rates. Taiwan has a very comprehensive and effective e-waste program: the 4-in-1 Program. In 2012 Taiwan recycled 50% of its e-waste; a rate twice as high as the United States in that year. (United States Environmental Protection Agency 2012). Last year Taiwan collected over 85% of its e-waste making it a world leader in e-waste recycling (Cook June 3, 2024). By comparison, the U.S. recycled only 32% of its e-waste last year (United States Environmental Protection Agency May 2024)

In our study, profiles of e-waste recycling intentions for each nation group are explored along with other key variables including perceived environmental knowledge, perceived consumer effectiveness, perceived responsibility, and social influence.

Methodology

Respondents from two mid-sized universities (one in Taiwan and the other in the southern U.S.) were recruited to complete an online Qualtrics survey. The English version of the questionnaire was translated into traditional Chinese, followed by a back-translation procedure for the questionnaire distributed in Taiwan. After reviewing a short description of e-waste and related e-waste recycling issues, students were asked to provide their age and gender and indicate how likely they were to recycle various items considered to produce e-waste (i.e. cell phone, computer, printer, and digital camera). Students were also asked to indicate, overall, how likely they would be to recycle household waste and e-waste, generally.

Perceived environmental responsibility was assessed with three items for *personal* responsibility and three items as a concern of *others* (government, environmental organizations and business) adapted from Paco and Rodrigues (2016). In addition, students' perceived environmental knowledge (Mostafa, 2007), perceived consumer effectiveness (PCE) (Straughan and Roberts,

1999), their environmental concern (Lee, 2008) and social influence (using the Scale of Social Influence (SSI), (Lee, 2008)) were measured. All items were measured on 5-point Likert scales.

Findings

The analysis included responses from a total of 215 college students (119 respondents in the U.S. and 96 respondents in Taiwan). Dimensionality of each scale was verified and reliability was deemed acceptable with Cronbach's alpha coefficients all greater than 0.8. Items within each scale were summed to produce overall composite scores for analysis.

Controlling for the effect of country (Taiwan versus the U.S.), the dependent variable, intention to recycle, was regressed on the six independent, composite variables which captured the key, student e-waste perceptions and attitudes measured in the study as displayed in Table 1 below. Table 2 displays the regression results for each of the models generated to predict intention to recycle for each of the four products: digital camera, printer, computer and cell phone.

Table 1 - Descriptive Statistics for Composite Variables*

	Group Nation	Mean	Std. Dev	N
E recycle item (max = 20)	U.S.	10.85	4.94	119
	Taiwan	13.56	4.39	96
	Total	12.07	4.89	215
E recycle general (max = 15)	U.S.	10.83	2.80	119
	Taiwan	12.25	2.63	96
	Total	11.47	2.81	215
Knowledge (max = 25)	U.S.	12.74	4.19	119
	Taiwan	15.14	3.81	96
	Total	13.81	4.19	215
Effectiveness (max = 20)	U.S.	10.53	2.13	119
	Taiwan	10.74	2.28	96
	Total	10.62	2.19	215
E concern (max = 20)	U.S.	13.48	3.74	119
	Taiwan	12.97	3.18	96
	Total	13.25	3.50	215
Social inf** (max = 30)	U.S.	14.78	5.79	119
	Taiwan	13.83	6.03	96
	Total	14.36	5.91	215
Personal resp (max = 15)	U.S.	10.00	2.99	119
	Taiwan	11.93	2.35	96
	Total	10.86	2.88	215
Others resp (max = 15)	U.S.	7.78	3.16	119
	Taiwan	4.86	2.67	96
	Total	6.48	3.28	215

* individual items measured on a scale from 1 to 5 where 1=disagree and 5=agree

** individual items measured on a scale from 1 to 5 where 1=a little and 5=a lot

Table 2 – Step-wise Regression Results: Intention to Recycle and Cognitive Influences

(Standardized Beta Coefficients)

	<i>Digital Camera</i>	<i>Printer</i>	<i>Computer</i>	<i>Cell Phone</i>
Personal Responsibility	.203	.263	.210	.201
Knowledge	.237	.191	.200	NS
Social Influence	NS	NS	NS	.185
Taiwan	NS	.242	NS	NS
R Square	.137	.271	.112	.099
F And Sig	16.74: P=<.001	25.91: P<.001	14.37: P<.001	11.56: P<.001

As the regression results suggest, Taiwanese students had significantly higher intentions to recycle printers than that of U.S. students, while no differences in intentions to recycle were detected between the two groups for the other three products. In all four models, perceived personal responsibility for recycling was positively correlated with recycling intentions. Interestingly, however, perceived knowledge was positively correlated with intentions to recycle for digital cameras, printers and computers, but not for cell phones. In contrast, one's perceived social influence was positively correlated with recycling intentions only in the case of cell phones.

Discussion and Managerial Implications

The results of our study demonstrate the importance of both knowledge of an environmental problem and the acceptance of personal responsibility for recycling efforts to be successful, with some noticeable differences on different types of electronic devices. While in our study young consumers in both the U.S. and Taiwan exhibit similar intentions to recycle, the higher intentions to recycle printers among Taiwanese young consumers require further exploration. One factor contributing to this difference might be the usage level of printers between the U.S. and Taiwan. Another factor might be grounded in the cultural differences between Asian and Western cultures, as a printer is more likely to be an electronic device for public use, while the other three products (i.e., digital camera, computer, and cell phone) are more likely personal devices.

In addition, our study also indicates that perceived knowledge is not positively correlated with intention to recycle cellphones, while perceived social influence was only positively correlated with intention to recycle cellphones. We also suspect that the usage level and personal significance of cell phones versus the other three products might play an important role in the difference here. Further research is needed to explore the impact of usage level and cultural differences.

The results of this study can help marketers and policy makers understand e-waste recycling behavior of young consumers in the U.S. and Taiwan. The observed differences suggest a varied approach should be taken in different countries to encourage young consumers in environmentally-friendly behaviors, particularly in e-waste recycling.

Keywords: E-Waste, Recycling, Perceived Environmental Responsibility, Perceived Environmental Knowledge, Environmental Concern, Perceived Consumer Effectiveness

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Track: Consumer Behavior
ID#: 1764

Sustainability Challenges and Consumer Perceptions: A Cross-Generational Analysis

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Extended Abstract

Keywords: Sustainability, Customer Value, Generational Cohorts

The evolving landscape of sustainable practices emphasizes the shift from short-term, profit-driven approaches to long-term strategies. Sustainability is now a global initiative encompassing various sectors, including academic research, contributing to successful implementation. The success of a business is no longer solely measured by profit; it depends on a commitment to sustainable practices, reflecting a response to market trends and environmental and societal needs (Grubor et al., 2017). Sustainability is framed as a core concept, balancing economic, social, and environmental factors in decision-making. Forward-thinking businesses recognize sustainability as a source of innovation and competitive advantage, engaging in activities to reduce their environmental footprint and enhance social impact (Kalender et al., 2016).

Companies striving for competitive advantage in the dynamic business environment focus on providing superior customer value. Shifting from a product-centric to a customer-centric approach is essential for long-term success (Woodruff, 1997). Understanding customers goes beyond surface-level insights, delving into current needs, preferences, and behaviors, and anticipating future changes. Adapting to evolving customer perceptions of value is crucial for staying relevant (Flint et al., 1997).

Customer value, representing perceived benefits and overall worth, is pivotal. Crafting compelling customer value propositions requires a deep understanding of customer motivations and aligning resources with customer needs (Slater, 1997). Consumer values significantly shift towards sustainable choices, influencing tourism, online retail, and fashion industries. Major corporations are making commitments, like achieving zero emissions, aligning with the Sustainable Development Goals, and showcasing a growing recognition of the importance of sustainability. Sustainable product development is a priority for many companies, but understanding consumer purchasing decisions is crucial for these products to succeed (De Medeiros et al., 2013). Environmental concerns, ethical considerations, and perceived quality and value play a role in consumers choosing sustainable products.

Consumer awareness of the environmental impact of consumption habits is growing, influencing their product and service choices (Trivedi et al., 2018). Sustainable performance now plays a pivotal role in consumer buying behavior, and businesses strive to create value for customers (Vega-Vazquez et al., 2013). Customer value is a complex concept involving a reciprocal relationship and subjective perceptions influenced by various factors (Heinonen et al., 2019). The means-end theory provides a hierarchical framework for understanding customer value,

involving attributes, consequences, and desired end states (Gardial et al., 2008). Customers seek practical benefits and psychological and emotional satisfaction from sustainable products, stating their lifestyle and values (Haigh, 2011). The perception gap, the disparity between customer and retailer views, highlights the importance of aligning with and meeting customer expectations (Anitsal, 2007).

In today's dynamic business landscape, consumers are not solely driven by price; they are informed and influential, shaping the values businesses should align with (Vega-Vazquez et al., 2013). Environmental and social consciousness have influenced consumer behavior and perception of value, with sustainability becoming a positive factor in decision-making. Businesses that align with customers' environmental and ethical values gain a competitive edge. Sustainability has become a key driver of customer preference, significantly impacting a business's success (Pickett-Baker et al., 2008). Sustainable behavior encompasses environmental, social, and economic aspects intertwined with the Value Hierarchy Model (Barrera-Verdugo, 2022). Customers systematically conceptualize desired value, deconstructed into dimensions like attributes, attribute performances, and consequences (Gardial et al., 2008). The hierarchy reveals how customers assign significance based on their goals and purposes, creating a holistic framework for assessing product and experience value (Woodruff, 1997).

Understanding variables that motivate sustainable purchases is vital for successful implementation (de Medeiros et al., 2013). Perceived customer value, assessed through means-end theory, is crucial for businesses to design and market products aligning with customer goals and values (Gardial et al., 2008). The exploration of sustainable products involves diverse terminologies like "green purchase," "sustainable purchase," "green consumption," and "green product," reflecting the multidimensional nature of sustainability in the context of consumer choices (Ham et al., 2022; Bordian et al., 2023; Djafarova et al., 2022).

The sustainable practices businesses implement create different hierarchy levels of value for customers. Understanding and managing sustainable perceived value is crucial for marketing and product development strategies (Viciunaite et al., 2020). This involves uncovering the factors influencing consumers' views of sustainable products and classifying them within the triple bottom-line framework (Camilleri et al., 2023). The triple-bottom-line framework provides a comprehensive perspective, aiding businesses in gaining a deeper understanding and enabling them to develop more effective strategies. Implemented by businesses, sustainable practices create various levels of customer value by aligning with environmental considerations and outcomes. Managing sustainable perceived value is crucial for effective marketing and product development strategies (Viciunaite et al., 2020). Understanding the factors influencing consumers' views of sustainable products within the triple bottom-line framework aids businesses in developing comprehensive strategies

Attributes are the tangible or observable features of a product or service. These are characteristics that customers can directly perceive, measure, or experience (Gardial et al., 2008). In the context of sustainable products, attributes refer to specific features that make a product environmentally friendly or socially responsible, including energy efficiency, recyclability, ethical sourcing, and eco-labeling (Yue et al., 2016). In the decision-making process, customers seek products that are not harmful to nature, emphasizing recyclable ingredients and reducing

environmental pollution during usage (Kumar et al., 2015). Encouraging sustainable behavior requires consumers to choose products crafted from eco-friendly materials or opt for second-hand options (Rausch et al., 2021).

Utilizing sustainability labels is crucial, serving as indicators of a product's environmental and ethical attributes. These labels empower consumers to make informed choices aligned with their values, fostering a more environmentally conscious approach (Viciunaite, 2020). Minimizing emissions, emphasizing low emission levels, and prioritizing sustainable materials contribute to mitigating environmental impact and creating environmentally responsible products (Yue, 2016; Viciunaite, 2020). Manufacturers benefit from aligning with environmental conservation goals and contributing to a sustainable marketplace. Energy-efficient practices further contribute to resource conservation and reduce greenhouse gas emissions, aligning with environmental sustainability and benefiting consumers economically (Sonetti, 2019). Prioritizing fair trade ensures ethical practices throughout the supply chain, addressing social and economic inequalities (Buffa, 2015). Minimizing waste aligns with environmental responsibility, yielding cost savings and contributing to a circular economy (Huang et al., 2022).

The next level of the value hierarchy, consequences, are the outcomes or results that customers believe will arise from the presence of specific attributes. They represent the perceived benefits or drawbacks associated with the attributes of a product (Gardial et al., 2008). The consequences of sustainable practices on customer value include diminished environmental impact, financial savings, and a sense of contributing to societal benefits generated by sustainable attributes (Barrera-Verdugo, 2022). Sustainable lifestyle choices, social responsibility, and environmental protection are integral to these outcomes, reflecting customers' aspirations to positively impact society and the environment (Haigh, 2011).

Customers derive personal fulfillment from a sustainable lifestyle motivated by the broader impact of their choices on the environment and society (Kumar et al., 2015). Deepening environmental awareness attracts customers to green marketing efforts, emphasizing eco-friendliness and environmental benefits integrated into daily lives (Pickett-Baker, 2018; Djafarova et al., 2022). Social responsibility is expected when companies demonstrate genuine sustainable efforts, influencing customer endorsement and support (Ham et al., 2022). Customers actively support businesses engaging in environmentally responsible practices and avoid those associated with environmental pollution, highlighting the significant influence of sustainability values on purchase decisions. Sustainable practices also impact the perceived legacy for future generations, with gender and generational factors influencing this effect. Young consumers recognize the potential to safeguard or jeopardize future generations' access to resources, leading to a commitment to actions that do not harm the planet (Djafarova et al., 2022).

Values of desired end states represent the ultimate goals or personal values customers seek to fulfill through consuming a product or service (Gardial et al., 2008). For a sustainable product, the desired end state is the customer's satisfaction derived from making environmentally conscious choices, contributing to societal well-being, or aligning with ethical and responsible consumption practices. Social identities play a role, with consumers selecting products that communicate their identities and signal elevated social status through sustainable consumption decisions (Brick et al., 2017; Palomo-Vélez et al., 2021; Giskevicius et al., 2010). This

phenomenon suggests that consumers choose eco-friendly products for their environmental benefits and to showcase a commitment to societal values associated with sustainability.

Generational differences influence attitudes and behaviors related to sustainability, impacting purchasing decisions (Yamane et al., 2021). Baby Boomers show less interest in sustainability due to their upbringing in an era with less environmental consciousness (Nichols et al., 2022). With higher disposable income, Generation X focuses on practical sustainability, emphasizing price and achievable practices (Brand, 2022). Millennials are environmentally aware, prefer sustainable products, support eco-friendly brands, and are willing to pay more for sustainability (Nichols et al., 2022). Generation Z, born in the digital age, is highly concerned about ethical and environmental issues, influencing their purchasing decisions (Djafarova et al., 2022).

Millennials are known for their heightened environmental awareness. They have grown up in an era of increased environmental challenges and concerns, such as climate change, and are often deeply committed to addressing these issues. Many Millennials prefer to purchase sustainable products and support eco-friendly brands and are more likely willing to pay more for sustainable products (Nichols et al., 2023). They actively seek products with environmentally responsible certifications and practices, such as organic, fair trade, or cruelty-free. Millennials find business practices appealing when they surpass the mere communication of a product's sustainability; instead, they should incorporate customers' values. This involves highlighting how purchasing the product can actively contribute to resolving or alleviating social and environmental issues (Falke et al., 2022).

Generation Z has a strong awareness and desire towards ethical and environmental issues (Djafarova et al., 2022). Therefore, sustainability is one of the considerations when they make purchase decisions compared to other generational cohorts. Young people are interested in specific aspects of sustainability, which affects how they make decisions, what motivates them, and how they behave (Buffa, 2015). Consumers, especially younger ones, are willing to pay more for environmentally friendly or responsibly sourced products, showing their support for sustainability through their purchases (Nichols et al., 2023). Generation Z is soon to become the next dominant generation and is equally concerned, and in many cases more concerned, about sustainability than millennials. Some research findings show that Generation Z consumers are influential actors in the family decision-making process and are likely to guide their Generation X parents in favor of online retailers while choosing the point of sale.

Customer values contribute to enduring competitive advantages and fostering sustainable growth. The research aims to incorporate the customer value hierarchy perspective into sustainable objectives, categorizing sustainable practices within each value hierarchy level. By highlighting the right attributes and linking them to meaningful consequences and values, marketers can appeal to consumers' deeper motivations and values, making their products more compelling and aligning them with customer needs and desires. The study focuses on Millennials and Generation Z, considering their substantial influence in shaping decision-making processes and their strong inclination towards pro-environmental behaviors.

Understanding customer values and aligning products with these values is crucial for businesses to gain a competitive advantage in the evolving landscape of sustainable consumption. The

varied terminology used in the literature reflects the complexity of sustainability, encompassing environmental, economic, and social dimensions in the context of consumer choices—the multifaceted nature of sustainable perceived value, spanning attributes, consequences, and desired end states. Businesses must align with the diverse factors influencing consumer choices to foster a more sustainable marketplace and contribute to environmental and social well-being. The interconnectedness of these elements emphasizes the need for comprehensive strategies that consider the entire lifecycle of products and services, from sourcing sustainable materials to promoting ethical practices and signaling positive social identities.

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Track: Consumer Behavior

ID#: 1769

Tech Twists and Turns: Unveiling New Privacy Paradoxes of Technology for Later Adulthood Consumers

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Abstract

This study investigates the privacy concerns and coping strategies of older consumers when using interactive technologies such as smartphones, online shopping platforms, and digital marketing tools. Drawing on a comprehensive literature review, we consider the complexities of aging and heterogeneity within the later adulthood demographic in terms of consumer behavior. Previous studies have highlighted various theoretical perspectives on aging, from chronological and biological definitions to the social construction of old age, as well as identity dynamics tied to consumption. However, our understanding of how aging shapes consumer behaviors and privacy concerns, is often influenced by cultural stereotypes and societal expectations. This research addresses a gap in the literature by focusing on the underexplored topic of how older adults perceive and manage privacy in an increasingly connected and interactive digital world while attempting to avoid being stereotyped.

We conducted semi-structured interviews with 10 senior consumers (55+). Using a grounded theory approach, we uncovered that their perception of privacy is related to five key themes: Control, Trust, Threats, Society, and a Personal Engagement with Technology (Me). These themes reveal ambivalent attitudes toward technology, with respondents expressing both enthusiasm for innovation and anxiety over privacy intrusions.

Employing the theoretical framework of the paradoxes of technology we were aiming to understand the polar feelings consumers experience—such as control versus chaos, and freedom versus enslavement—when interacting with digital devices. Our findings indicate that while many older consumers appreciate the convenience of technology, they simultaneously harbor concerns about data collection, surveillance, and misinformation.

This research contributes to consumer behavior literature by offering a nuanced view of the privacy challenges faced by older adults, particularly related to smart technologies. Additionally, it extends our understanding of how identity and aging intersect with privacy concerns, challenging age-based stereotypes. This research allows for a more comprehensive understanding of how privacy perceptions differ between age groups and how societal norms around technology and privacy are evolving.

Keywords: Consumer Privacy, Older Consumers, Interactive technologies, Smartphones, Paradoxes of Technology, Grounded Theory

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The Effect of AI Disclosure on Donation Intention

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Abstract

This study explores the impact of AI disclosure on donation intentions in the context of charitable giving advertisements. We investigate how revealing the use of AI in generating donation solicitations influences potential donors' trust and emotional engagement. Drawing on the concept of AI aversion, we propose that AI disclosure negatively affects donation intentions due to reduced emotional concern and perceived sincerity of the organization. Our findings support this hypothesis, revealing a significant negative effect of AI disclosure on donation intentions. Additionally, this relationship is mediated by emotional concern and perceived sincerity. Furthermore, the mediating effect of emotional concern between AI disclosure and donation intentions is moderated by the facial expressions in the solicitation content. These insights have practical implications for non-profits in designing AI-driven strategies that maintain donor trust and engagement, and for advancing the theoretical understanding of AI aversion in human decision-making.

Keywords: AI Disclosure, Donation Intentions, Non-Profit Marketing, Perceived Sincerity, Facial Expressions

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Would You Like an AI Upgrade With That?

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Abstract

An exploratory study was conducted to ascertain the acceptance of the utilization of artificial Intelligence (AI) in various applications of interest to consumers. AI knowledge and use by respondents was also noted. Findings indicate that personal risk may play a part in consumer acceptance of the use of AI in providing consumer goods and services. AI user experience may also play a role in increasing acceptance.

Artificial intelligence (AI), in the form of machine learning, first arrived in the 1950's with a demonstration of machine versus human checker game. The first computer program named artificial intelligence was developed in 1956. From that early start, many more developments followed, and AI entered pop culture by way of popular movies, toys, novels, and applications such as self-operating vehicles and machines (Monahan, 2023).

Just as the development, improvement, and applications using AI have grown, some exponentially, over the past few years, so to has the amount of research into artificial intelligence. Liu, Kong, Xia, Bai, Wang, Qing, and Lee (2018) performed an analysis using nine journals and twelve conferences uncovering an "explosion of publications" in AI topics and the beginnings of sub-field research in the area.

For this research, an electronic survey was developed and distributed on a mid-western college campus, gathering responses from faculty, students, and staff. The survey included items to determine the individual's self-reported familiarity with AI, as well as their experience using AI in various applications, e.g. personal use, business use, in education and the acceptability of the use of AI in various applications.

A 7-item semantic differential scale was used to gather overall evaluation of the use of AI, addressing concepts such as trust, usefulness, and credibility. A sampling of potential uses of AI in areas familiar with most, if not all consumers was presented to gain an indication of the level of acceptable use in each of the areas. Significant differences in AI acceptability were found between numerous groupings within the sample such as gender and AI familiarity and previous experience with AI. Most all respondents, 83%, indicated some level of familiarity with AI and 74% had some level of usage in various applications of AI, e.g. personal assistant, home management, etc.

This study found limited use by respondents and varying attitudes towards the application of AI in particular instances familiar to most all individuals. Organizations implementing AI in aspects of their interactions with consumers should be aware of varying levels of acceptance. Further studies could determine additional factors consumers would evaluate in the AI use acceptability decision like benefit/cost ratio, disclosure of AI use, positive communications regarding AI successes, the use of an AI code of conduct, AI supervision, and the location of ultimate decision authority being some.

Keywords: Artificial Intelligence, Consumer Goods And Services, Consumer Attitude

Relevance to Marketing Educators, Researchers and/or Practitioners: As the use of Artificial Intelligence in its various forms and applications is being utilized widely and is projected to continue to grow in use, it is important to understand consumer reaction to the use of AI in all marketing touchpoints, such as advertising, manufacturing, consumer relations, service delivery and more. If consumers are less than accepting of the use of AI in these areas, attitude towards the brand, company, or provider may suffer, leaving consumers looking for a substitute that meshes better with their acceptance level of AI in marketing and other related activities.

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Track: Consumer Behavior

ID#: 1795

The Effect of Experiential and Material Purchases on Preference for Product-Country Image Labels

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Abstract

This research examines how purchase type (experiential vs. material) influences the tradeoffs between favorable vs. less favorable product-country image (PCI) labels. More specifically, these studies explore how retailers' framing of a product as either experiential or material affects tradeoffs between different PCIs. Four studies demonstrate that when making material purchases consumers tend to have a higher relative preference for favorable PCI compared to when making experiential purchases. Furthermore, this effect is moderated by the need for authenticity and the degree of importance consumers place on PCI. We further discuss theoretical and practical implications of our findings.

Product-country image, Experiential Purchases, Material Purchases, Authenticity, Extrinsic Motivation

Relevance to Marketing Educators, Researchers and/or Practitioners: These findings have notable implications for marketing practitioners and retailers seeking to leverage PCI in their persuasive efforts. The findings suggest that for products with favorable PCI cues, using material frames in communication campaigns would be advantageous. Conversely, in cases where favorable PCI cues are absent, employing an experiential frame is more beneficial. Furthermore, when targeting a specific segment of consumers which highly values authenticity or places greater importance on PCI, incorporating material framing into communication frames can be crucial. By adhering to these guidelines, marketers can optimize the effectiveness of their communication campaigns and foster greater consumer engagement of purchases. Thus, the current research provides insights that empower marketers to make informed decisions about campaign framing, ultimately maximizing the impact of PCI on consumer attitudes and behaviors.

Introduction

Consumers often rely on preconceived notions and stereotypes associated with a product-country image (PCI) to form initial impressions and make purchasing decisions. Thus, PCI serves as a cue for consumers, signaling product quality prior to purchase. Consumers often associate specific countries or regions with superior product quality and craftsmanship due to reputation, manufacturing processes, and adherence to quality standards, thus influencing consumers' preferences for products hailing from different countries (Godey et al. 2012; Huang et al. 2022). For instance, products from countries with established reputations for excellence, such as Germany or Japan in the automotive industry, are often perceived as higher in quality and in reliability.

PCI is playing an increasingly important role in consumer behaviors and preferences, exerting a significant influence on consumers' decision-making processes, making it a crucial factor for marketers and retailers to consider. For example, the influence of PCI is greatest for luxury products, as well as products that are publicly consumed (Piron 2000). Moreover, consumers consider PCI in their decision-making criteria when making luxury goods purchasing decisions, preferring to purchase luxury products from PCI which have mature luxury markets (Godey et al. 2010). Furthermore, PCI plays an especially significant role in purchasing decisions for those with low expertise in a product category. Specifically, in the absence of extensive knowledge, consumers' overall positive images of PCI create a halo, thus allowing novice consumers to form summary constructs about products in question (D'Alessandro and Pecotich 2013).

These important studies highlight the advantages realized by a PCI with favorable reputation, especially in regard to the product categories in question. However, prior research has failed to examine when consumers may prefer a product which hails from a country with a less favorable reputation relative to other countries. In the current research, we aim to better understand how consumers take PCI into account when decision making. Specifically, we draw on prior research on purchase types that explores experiential and material purchases as a potential boundary to the positive effect of a favorable PCI.

Recent work has taken a closer look at decisions related to experiential and material purchases. For example, purchase type influences tradeoffs between mystery and non-mystery deals (Urumutta Hewage and He 2022), willingness to borrow (Tully and Sharma 2018), consumption timing (Kumar and Gilovich 2016), and acceptance of price increases (Bastos 2019). In the current research, we examine another decision context — PCI tradeoffs — which is relevant to consumer purchase and consumption decisions. Given consumers have to make tradeoffs in their day to day lives (Tversky et al. 1988; Tully et al. 2015; Urumutta Hewage and He 2022), we put forth that it is important to study tradeoffs between PCIs. Across four studies, we suggest that, when considering material purchases, consumers place more emphasis on the strength of the PCI (as compared to when making an experiential purchase). We suggest that this effect is moderated by consumers' need for authenticity, as well as the importance placed on PCI.

Together, the findings presented here make two key theoretical contributions. First, our research extends recent work on experiential and material purchases by identifying another way in which these two purchase types differ in nature. While prior research has identified differences in purchase types, suggesting that experiential purchases increase consumer borrowing (Tully and Sharma 2018) and preference for mystery options (Urumutta Hewage and He 2022) when compared to material purchases, the current work demonstrates that purchase type also affects tradeoffs between differing PCI.

Second, we broaden the literature on PCI to suggest a key boundary to the positive effect of PCI. While prior literature contends that a favorable PCI is preferable (Bandyopadhyay and Banerjee 2003), we present a purchase type in which PCI is relatively less important, and thus consumers are more accepting of the less favorable PCI label. The current work contributes to existing literature on PCI by identifying a critical boundary condition that challenges the prevailing notion of a universally favorable PCI effect. By introducing a distinct purchase context, we

reveal that the significance of PCI diminishes, allowing consumers to show greater acceptance towards products with less favorable PCI associations. This finding extends prior PCI literature and highlights the need for a nuanced examination of the PCI effect across different purchase types.

Regardless of the direction of the influence of PCI, there is practical evidence suggesting that PCI is an important factor in international marketing strategies. This could not be timelier considering the abundance of companies who need to market their products across the globe. To be successful, those companies should examine the favorability of their PCI. Based on the favorability, they should select marketing communication strategies. More specifically, if a retailer markets a product with a favorable PCI, using a material frame in communication campaigns will be beneficial. However, if the PCI is not favorable it will be more beneficial to use an experiential frame. In particular, experiential frames are more appropriate for developing nations as they typically suffer from a negative PCI effect (Bandyopadhyay and Banerjee 2003). For these reasons, companies should consider PCI as a strategic tool when marketing products or services.

Literature Review

Product Country-Of-Origin Image (PCI)

The PCI is an important concept in international marketing which has connected both the image of the country and image of the product that originates from a certain country (Roth and Diamantopoulos 2009). It is defined as the “stereotype image countries and/or their outputs ... that ... impact on behavior” (Hooley et al. 1988 p. 67). Furthermore, Nebenzhal et al. (2003) refers to PCI as a set of consumer perceptions about the attributes of a product made in a certain country and the resulting social desirability of owning a product that is made in that specific country. Such cues alter consumer behaviors and preferences (Godey et al. 2010; Huang et al. 2022). More specifically, it is used as an extrinsic cue for product evaluation (Agrawal and Kamakura 1999) and purchase decisions (Hoang et al. 2022). Furthermore, PCI influences the degree to which consumers trust brands, which thus affects consumer engagement on social media (Huang et al. 2022).

Though PCI plays an important role in consumer behavior, only certain countries are perceived to possess a favorable image (Roth and Diamantopoulos 2009). For instance, Germany is perceived favorably for their cars, Italy has a favorable image for shoes and other leather products (Wang and Yang 2008), Switzerland for their chocolates (Herz and Diamantopoulos 2017), Japan is synonymous for quality electronics (Magnusson et al. 2011), while the United States is perceived as favorable for most consumer products (Pereira et al. 2005). Given the significance of PCI, Statista developed the “Made-In-Country-Index” to evaluate 49 countries. Their work encompassed a total of 43,034 consumers worldwide who represented 90 percent of the global population. Results indicated that regions that are seen as more favorable are Germany, Switzerland, and the European Union. In contrast, according to the “Made-In-Country-Index”, countries with less favorable PCI include Argentina, India, and China (Biagi 2017).

Prior work shows that countries with favorable PCI tend to have edge over those who have less favorable PCI (Ittersum et al. 2003). Consumers perceive higher benefits, and they are willing to

pay more for a product that comes from a favorable PCI compared to a product hailing from a less favorable PCI (Koschate-Fischer et al. 2012). Additional research suggests that brands that possess favorable PCI are more readily received by the consumers than brands that come from less favorable PCI (Mohd Yasin et al. 2007). Such favorability in PCI can lead to brand popularity and brand loyalty (Kim and Chung 1996). The notion of more or less favorable PCI plays a crucial role in Country-of-Origin (COO) research. Furthermore, PCI favorability is readily recognized by consumers and academics alike.

A favorable PCI can help signal status or manage impressions compared to a less favorable PCI (Heslop and Papadopoulos 1993; Nebenzhal et al. 2003). This extrinsic motivation can drive consumer preferences to acquire products with favorable PCI rather than less favorable ones. However, less is known about what might influence such motivation and consequently may lead to tradeoffs between favorable and less favorable PCIs. We propose that purchase type (experiential vs. material) can influence such tradeoffs.

Purchase Type

Prior work on purchase types has classified purchases based on different characteristics. One recent purchase categorization has gained attention both among academia and practitioners alike: classifying purchases based on the intention or motivation behind the purchase. For example, Van Boven and Gilovich (2003) defined experiential and material purchases based on their respective acquisition motives. Experiential purchases were defined as those in which non-tangible events or series of events are attained. In contrast, material purchases were defined as those in which tangible objects are acquired. Both consumers and marketers alike recognize the differences in these purchase types.

Material purchases compared to experiential purchases are driven by extrinsic motivations (Ho and Wyer 2021; Van Boven et al. 2010), such that consumers tend to emphasize the tangible outcomes gained from consumption (i.e., prestige, status, or popularity; Richins 1994; Vigneron and Johnson 2004). Given the intangible nature of experiential purchases, fulfilling tangible outcomes is more difficult. The difference between the underlying motivations for these two types of purchases can change how choice options are evaluated. It is reasonable to assume that extrinsic motivation generated by material purchases increases the emphasis on tangible outcomes compared to experiential purchases.

While marketing literature has acknowledged the importance of PCI on purchasing decisions, the connection between PCI and type of purchase has received little attention. To address this research gap, we examine whether there is an effect of purchase type (experiential vs. material) on relative preference for PCI (favorable vs. less favorable). We propose that purchase type and PCI are connected by motivation. Prior work has shown that material purchases are driven by extrinsic motivation (Ho and Wyer 2021; Van Boven et al. 2010) compared to the experiential purchases (Van Boven et al. 2010). When making material purchases, consumers are motivated by external rewards such as status or impression management rather than for pure enjoyment. To fulfill extrinsic motivations, consumers choose products that can signal status (Richins 1994; Vigneron and Johnson 2004). In fact, favorable PCI labels act as a status signaling or impression management mechanism and fulfill extrinsic motivational needs (Heslop and Papadopoulos 1993). Therefore, we hypothesize that for material purchases consumers will

display higher behavior intention towards favorable PCI label than for experiential purchases. Stated formally:

H1: Consumers will display higher relative behavior intentions towards more favorable PCI label for material purchases than for experiential purchases.

Consumers often rely on external product cues such as PCI in decision making (Hsu et al. 2017; Lim et al. 1994; Orłowski et al. 2022). However, some consumers tend to rely on extrinsic cues such as PCI more heavily than others when making choices (Urumutta Hewage et al. 2021). It is plausible that those who value PCI more have a higher relative preference for more favorable PCI for material purchases than those who place lower importance on PCI. For experiential purchases, extrinsic PCI cues do not matter because motivation for these types of purchases is less extrinsic. Therefore, even though consumers may have different levels of value of importance placed on PCI, it will not increase the preference for more favorable PCI. Stated formally:

H2: The effect of purchase type on relative preference for favorable PCI label is moderated by personal importance of PCI.

Psychology and marketing research alike recognize that consumers are heterogeneous in their intrinsic motivations when decision making (Chan et al. 2015; Urumutta Hewage et al. 2021; Xu and Huang 2019). For example, some consumers have a greater desire to obtain material goods which will make them feel unique, such as luxury goods (Chan et al. 2015), to fulfill status-seeking motivations (Clark et al. 2007).

Authenticity, too, serves as a motivating factor in decision making (Ferraro et al. 2016). For example, authenticity can increase consumer engagement, loyalty, and satisfaction, as well as product choice (Jones et al. 2022; Matthews et al. 2020). Importantly, PCI signifies authenticity of a product (Newman and Dhar 2014) and provides assurance of product legitimacy and originality (Nunes et al. 2021).

However, not all consumers have the same authenticity needs. Consumers who strongly desire authenticity deliberately seek out authentic goods, remain loyal to authentic brands, and forego consumption of inauthentic goods (Napoli et al. 2016). Thus, those who value authenticity will have a higher preference for more favorable PCI. As such, we predict that the purchase type effect on relative preference for favorable PCI depends on the need for authenticity. When the need for authenticity is high, consumers will have a greater preference for the favorable PCI. Stated formally:

H3: The effect of purchase type on relative preference for favorable PCI label is moderated by need for authenticity.

Four studies test our hypotheses. In Studies 1A and 1B, we examine consumers' relative preference for favorable PCI labels for material purchases compared to experiential purchases. Next, in Study 2, we test a theoretically relevant moderator: importance of PCI. Finally, Study 3 examines the boundary effect of the need for authenticity. In all four studies, we applied the

purchase framing technique frequently used in experiential and material literature (Carter and Gilovich 2010; 2012; Urumutta Hewage and He 2022). Further, for our dependent variable, we utilized comparable countries to complete a conservative test of our hypothesis. We also incorporated two different types of products to increase generalizability.

Study 1A

Method

In this study, we tested the role of material versus experiential purchases on the trade-offs between PCI purchase decisions (favorable vs. less favorable PCI label). We applied purchase framing, a technique used in prior literature in which a bottle of wine was framed as experiential or material (Carter and Gilovich 2010, 2012; Urumutta Hewage and He 2022). One hundred and one participants (Mage = 41.37, female 37.6%) from Amazon Mechanical Turk (MTurk) participated in the study for a nominal fee. Participants in the experiential condition were asked to think about drinking and sniffing the wine, while in the material condition they were asked to think about how wine would fit into their wine collection and the prominent place it would assume in the wine collection.

Next, participants completed the dependent variable. Consumer choice has been captured in numerous ways in the consumer decision making literature (Kamakura et al. 1996). For example, binary choice is one way of measuring where participants are asked to choose from two options (Carson 1994). Another way to capture choice is asking participants to make tradeoffs. For example, participants may be asked to make tradeoffs and indicate their relative preference between two options (Tversky et al. 1988). In the present work, we examined tradeoffs which led to relative preference for more favorable PCI.

Respondents were presented with two options which were told to be equal in monetary value: South African wine (less favorable COO label) and French wine (more favorable PCI label). South Africa and France were chosen as the countries for this study because France is often associated with its large wine industry (Wine Producing Countries 2022). While South Africa also has a thriving wine industry, the general consumer is not aware of this; thus, the two options were comparable in terms of size of wine industry. Next, participants were asked which wine they would choose on a 7-point scale (1 = Most likely to choose South African wine/7 = Most likely to choose French wine). Participants completed the manipulation check for purchase framing followed by the purchase type definition (“To what extent do you think the wine bottle that you imagined at the beginning of the survey is: 1 = Completely experiential/5 = Completely material”; adapted from Van Boven and Gilovich 2003). Then, we administered the manipulation check for COO favorability adapted from Hooley et al. (1988) and Nebenzhal et al. (2003). Participants were asked to rate their agreement with two statements: “South Africa is known for wines” and “France is known for wines” (1 = Strongly disagree/5 = Strongly agree). Lastly, participants indicated their age and gender.

Results and Discussion

First, we analyzed the manipulation check for purchase type. Participants in the material condition perceived the wine to be more material ($M_{\text{material}} = 3.12$) compared to participants in

the experiential condition ($M_{\text{experiential}} = 2.40$, $F(1,99) = 7.88$, $p < .01$). Next, we conducted a manipulation check for PCI favorability using one sample t-test, in which the mid-point was 3 in the scale. We found that France was perceived as a favorable PCI for wine ($M = 4.69$, $t(101) = 28.56$, $p < .001$) while South Africa ($M = 2.14$, $t(101) = -7.97$, $p < .001$) was perceived to possess a less favorable PCI for wine.

To test whether purchase type affected relative preference towards the option with favorable PCI, we conducted an independent samples t-test in which we compared the means of the experiential and material groups. We used purchase type as the independent variable and relative preference for favorable PCI as the dependent variable. Participants in the material condition had a higher likelihood to choose the French wine ($M_{\text{material}} = 5.67$) compared to participants in the experiential condition ($M_{\text{experiential}} = 4.98$, $F(1,99) = 4.12$, $p < .05$).

This study supports Hypothesis 1 as consumers had higher relative preference for more favorable PCI when making a material purchase than when making an experiential purchase. In this study, we manipulated the purchase type by framing the same item, a bottle of wine, as either an experiential or material product. To further ensure that the observed effect remains in place for a wide range of stimuli, we conducted Study 1B.

Study 1B

Method

To confirm that this effect would be seen with a different product category, we conducted a second study. One hundred and two MTurk workers ($M_{\text{age}} = 39.65$, female 52.9%) participated in this experiment, wherein a unisex watch was framed as either experiential or material purchase type. Participants in the experiential condition imagined how they would feel wearing the watch, how they would use it, and how it would go with their daily activities. In the material condition, participants imagined the aesthetics of the watch, how reliable and durable it would be, and how it would fit with their other accessories.

Next, participants were presented with two European PCI options which were equal in monetary value: English watch (less favorable PCI label) and Swiss watch (more favorable PCI label). England was chosen as the less favorable PCI option because the country is comparable to Switzerland in terms of watch production and general country economics (NationMaster, 2022). From these options, participants were asked to choose which one they would prefer on a 7-point scale (1 = Most likely to choose English watch/7 = Most likely to choose Swiss watch). Next, we administered manipulation checks for both purchase type and PCI. For purchase type, they were prompted to answer: "To what extent do you think the watch that you imagined at the beginning of the survey is: 1 = Completely experiential/5 = Completely material". For PCI, respondents were asked to indicate their agreement with the following: "England is known for watch products" and "Switzerland is known for watch products" (1 = Strongly disagree/5 = Strongly agree). Finally, participants provided their ages and genders.

Results and Discussion

We first analyzed the manipulation check for purchase type. Participants in the material

condition perceived the watch to be more material ($M_{\text{material}} = 4.54$) compared to participants in the experiential condition ($M_{\text{experiential}} = 3.39$, $F(1,100) = 24.46$, $p < .001$), indicating that the manipulation check work as intended. Next, we examined the manipulation check for PCI favorability. Switzerland was perceived as more favorable PCI for watches ($M = 4.54$, $t(101) = 24.87$), $p < .001$) opposed to England ($M = 3.39$, $t(101) = -3.57$; $p = .001$) which was the less favorable PCI option.

Replicating previous results and in further support of H1, participants primed with the material frame demonstrated a higher relative preference for more favorable PCI ($M_{\text{material}} = 6.24$) than those primed with the experiential frame ($M_{\text{experiential}} = 4.98$, $F(1,100) = 10.91$, $p < .001$). Once again, we found support for our effect of purchase type on the tradeoffs between the PCI labels. In the next study, we provide further evidence by testing a boundary condition to this effect.

Study 2

Method

The goal of this study was to examine the moderating role of importance of PCI on the relationship between purchase type and the relative preference for favorable PCI label. We used a convenience sampling method by posting the study link in the social media. One hundred and seven participants ($M_{\text{age}} = 26.48$, female 70.1%) completed the study. We used the same manipulation of bottle of wine as in Study 1A. First, participants read either experiential or material framing of the bottle of wine. Next, they indicated for which bottle of wine they are likely to search more information on a 5-point scale (1=More for German wine/5=More for French wine). Note that we included German wine as the less favorable PCI option, which is comparable country to France but lesser-known country for wine. Afterwards, participants were given a description of what PCI meant (adapted from Hooley et al. 1988; Nebenzhal et al. 2003) and asked to rate the extent to which they considered PCI to be important for the decision that they made on a 5-point scale (1=None at all/5=A great deal). Next, participants completed the same manipulation checks for PCI favorability and purchase type as in Study 1A. Finally, participants answered the demographics questions and concluded the survey.

Results and Discussion

First, we examined the manipulation checks. Participants in the material condition perceived the bottle of wine to be more material in nature ($M_{\text{material}} = 3.04$) than the participants in the experiential condition ($M_{\text{experiential}} = 2.54$, $F(1, 105) = 4.15$, $p < .05$). PCI manipulation checks indicated that German wine was perceived as less favorable PCI ($M = 1.91$, $t(106) = -12.62$, $p < .001$), while French wine ($M = 4.46$, $t(106) = 19.32$, $p < .001$) was perceived as more favorable PCI compared to the mid-point (3 in a 5-point scale).

We conducted a regression using purchase type (categorical) and importance of PCI (continuous) and their interaction as independent variables and likelihood to search information for the more favorable PCI. Experiential condition was coded as 1 and material condition coded as -1. We observed a significant interaction between purchase type and importance of COO ($\beta = -.30$, $t(103) = -2.34$, $p < .05$), suggesting that our effect is contingent upon the importance of PCI.

However, purchase type ($\beta = .88$, $t(103) = 1.77$, $p = .08$) and PCI effects ($\beta = .00$, $t(103) = .03$, $p = .97$) on relative information search for superior PCI were not significant. Next, to understand the type of interaction, we conducted a spotlight analysis using PROCESS Model 1 (Preacher and Hayes 2008) to identify regions of significance. We observed a Johnson-Neyman point (Spiller et al. 2013) 3.92+ in importance of PCI (see Figure 1). When the importance of PCI was 3.92 or above participants were more likely to seek information for the favorable PCI option in the materially framed wine than in the experientially framed wine. Study 2 provides evidence that our effect depends on the importance one places on PCI. Next, we examine another boundary condition for our effect.

[Insert Figure 1 here]

Study 3

Method

The objective of Study 3 was to examine the moderating role for need for authenticity. Ninety-nine participants were recruited from MTurk (Mage = 19.34, female 46.5%). We used the same stimuli used in Study 1B. The study design was exactly similar to Study 1B except, we included a question about authenticity consideration in their purchase decision on a 5-point scale (1=None at all/5=A great deal). Participants concluded the survey by completing the manipulation checks for PCI and purchase type and recording the demographics information.

Results and Discussion

Manipulation of purchase type was satisfactory, whereby material condition participants perceiving watch to be more material ($M_{\text{material}} = 4.22$) than those in the experiential condition ($M_{\text{experiential}} = 3.15$, $F(1,97) = 17.76$). Analysis revealed that English watch was known for less favorable PCI ($M = 2.61$, $t(98) = -3.49$, $p < .001$) than the Swiss watch ($M = 4.59$, $t(98) = 22.09$, $p < .001$) compared to the mid-point (one samples t-test).

We conducted a regression using purchase type and need for authenticity and their interaction as the independent variables and relative preference for favorable PCI as the dependent variables. Experiential condition was coded as 1 and material condition coded as -1. The interaction between purchase type and need for authenticity was significant ($\beta = -.19$, $t(95) = -2.05$, $p < .05$), suggesting that the effect authenticity consideration is an important boundary condition. Purchase type was not significant ($\beta = .60$, $t(95) = 1.60$, $p = .11$) in the model while need for authenticity was significant ($\beta = .21$, $t(95) = 2.25$, $p = .03$). Next, to explicate the interaction we conducted a spotlight analysis (Preacher and Hayes 2008) as in Study 2. We observed a Johnson Neyman (Spiller et al. 2013) region above 4.31 of need for authenticity (see Figure 2). This suggests that when the need for authenticity was more than 4.31, participants had a higher relative preference for favorable PCI label in material condition than in the experiential condition. This study supports H3, that the need for authenticity acts as a boundary condition for the effect of purchase type on relative preference for favorable PCI.

[Insert Figure 2 here]

General Discussion

In this research, we demonstrated that consumers have a higher relative preference for more favorable PCI options when making material purchases than when making experiential purchases (Studies 1A-1B). This effect is moderated by the personal importance of PCI (Study 2) and need for authenticity (Study 3). To show greater generalizability, our effect was tested on two different product categories and with five different PCI labels. The outcome was consistent across the samples regardless of the product category or countries used. Additionally, we used purchase framing to operationalize purchase type rather than different type of product, which is a conservative test of our effect.

Theoretical and Practical Implications

Our work makes important contributions for both theory and practice. We add to the experiential and material literature by understanding PCI tradeoffs as an important downstream consequence to purchase type (Tully et al. 2015; Urumutta Hewage and He 2022). We show that purchase type influences relative preference for more favorable PCI. More specifically, material purchases may benefit from having favorable PCI than experiential purchases. We also contribute to consumer decision making, specifically, consumer tradeoffs literature (Chitturi et al. 2007; Tversky et al. 1988). Given consumers have limited financial resources, they have to make tradeoffs all the time. We show that one such tradeoff is between PCI labels.

In addition to expanding the PCI literature (Hooley et al. 1988; Nebenzhal et al. 2003; Roth and Diamantopoulos 2009), our research uncovers a crucial limitation to the positive influence of a favorable PCI. Contrary to previous studies emphasizing the preference for a favorable PCI (Bandyopadhyay and Banerjee 2003), we introduce a specific purchase scenario where the significance of PCI diminishes, thus offering a more comprehensive understanding of the dynamics of PCI. When shopping for an experiential purchase, consumers exhibit greater openness towards purchases from a less favorable PCI. Our work sheds lights on the nuanced nature of the PCI effect and its contextual variability, thus challenging the prevailing notion of a universally favorable PCI effect that is emphasized in prior work and contributing to a more nuanced understanding of consumer behavior and PCI implications. Furthermore, the findings presented here suggest that the impact of purchase type on PCI tradeoffs is contingent upon consumers' prioritization of authenticity and the significance they attribute to PCI cues. This too highlights the complex interplay between consumer values, product attributes, and the PCI effect and further emphasizes the need for marketing strategies which align with consumers' preferences and priorities.

Lastly, these findings have notable implications for marketing practitioners and retailers seeking to leverage PCI in their persuasive efforts. The findings suggest that for products with favorable PCI cues, using material frames in communication campaigns would be advantageous.

Conversely, in cases where favorable PCI cues are absent, employing an experiential frame is more beneficial. Furthermore, when targeting a specific segment of consumers which highly values authenticity or places greater importance on PCI, incorporating material framing into communication frames can be crucial. By adhering to these guidelines, marketers can optimize the effectiveness of their communication campaigns and foster greater consumer engagement of purchases. Thus, the current research provides insights that empower marketers to make

informed decisions about campaign framing, ultimately maximizing the impact of PCI on consumer attitudes and behaviors.

Limitations and Future Research

While this research shows a relationship between purchase type and relative preference for favorable PCI label, it does have limitations. We used a convenience sample method by recruiting participants from MTurk and via social media. It is encouraged to test this effect using larger samples that have a better representation of the general population. Only participants located in the United States were used in the current work. The United States is considered an individualist culture (Patel, Trivedi, and Yagnik 2020). Therefore, we encourage researchers to test the effect in more collectivist countries to see whether our findings hold. In addition, we encourage researchers to test other potential boundary conditions such as consumers' political ideologies, as this can affect motivations for status products (Urumutta et al. 2021), as well as consumers' perceptions of the ideologies of brands themselves (Boman, Urumutta Hewage, and Hasford 2023).

In our current work, we only tested two product categories (i.e., wine and watch) and we encourage future research to investigate new product categories in which consumers emphasize PCI more. In addition, we used comparable countries for PCI. More extreme examples (e.g., China vs. France for wine) would produce an even more pronounced effect. Therefore, it is ideal to test more countries that range different levels of PCI. Such work can increase the generalizability of the outcome.

In conclusion, the current research demonstrates how purchase type (i.e., experiential vs material) can influence consumer preference for different PCI. Given the increase in globalization for consumer goods, we hope that research continues exploring the implications of purchase type and PCI on consumer behavior.

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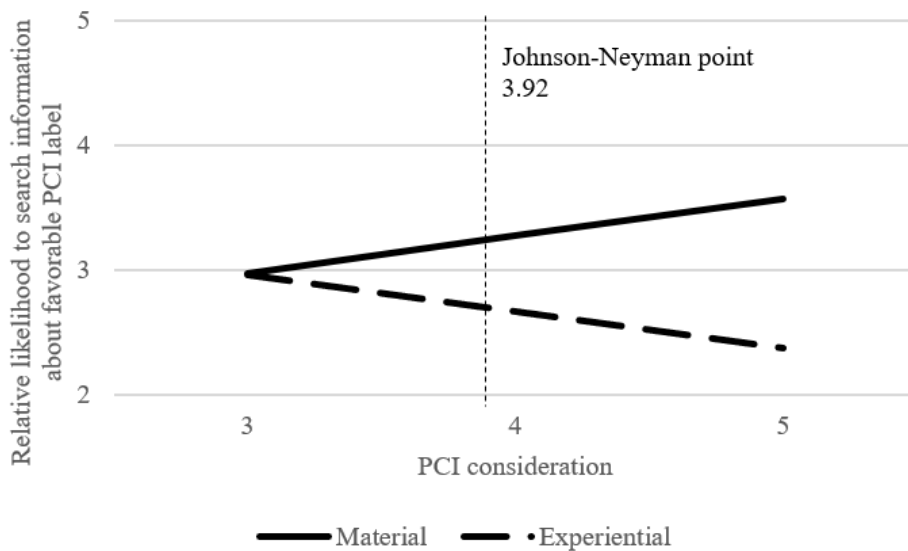


Figure 1. Interactive effect of purchase type and PCI consideration on relative likelihood to search information about favorable PCI label.

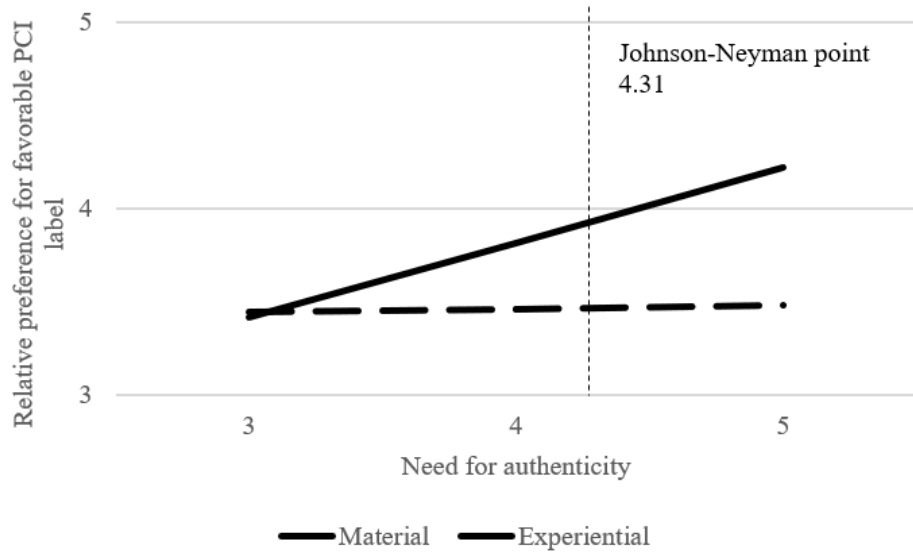


Figure 2. Interactive effect of purchase type and need for authenticity on relative preference for favorable PCI label.

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Track: Consumer Behavior
ID#: 1761

Navigation Bar Design Effects on Consumer Visual Processing

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Abstract

Despite the crucial role that a website navigation bar can play in affecting consumer behavior, there has been a lack of theory driven studies to investigate how to most effectively design navigation bars. Based on cognitive fit theory, this study investigates how the effects of navigation bar design can affect visual processing of an online retailer's website. A total of 35 subjects participated in a controlled experiment in which we gathered and analyzed eye tracking data. We find significant effects of navigation bar designs on consumers' visual processing behaviors as predicted by cognitive fit theory.

Introduction

Humans' capacity to process information is limited and the ability to problem-solve is improved when complexity is reduced by presenting information that is relevant to the task at hand (Vessey, 1991). For online retailers, that means communicating what a site and brand offers as soon as users land at the site, and calling out ways to engage with the site's content in ways that are productive for the consumer. The navigation bar, in particular, may play a key role in informing consumers about products and brands available for purchase by displaying the kinds of products being sold (e.g., Shoes, Handbags, Jewelry & Accessories) and/or the audiences that the brand appeals to (e.g., Women, Men, Juniors, Kids).

This research focuses on how characteristics of navigation bars may affect consumer visual processing. Specifically, we investigate how the placement of a navigation bar and the consistency of the product categories displayed in the navigation bar influence the ways in which consumers look at retail website content. In both cases, navigation bars can meet expectations or not. A navigation bar is typically found running horizontally at the top of a homepage, and product categories, taken together, typically represent a group of common items. However, this is not always the case. Sometimes navigation bars are placed in less usual places and sometimes companies will try to add a product category that is unusual compared to the other items they offer. Whether the design of a navigation bar matches expectations may affect consumers' visual processing of a website. In addition, consumer goals may interact with these expectations further to affect visual processing as well.

Neuromarketing research techniques provide researchers the opportunity to better understand how consumers behave in situations when navigation bar designs meet or do not meet consumer expectations. Compared to self-report data, the objectivity of neuromarketing research techniques is considered an important and more reliable alternative (Ford, 2019). Eye-tracking research studies rely on the eye-mind hypothesis, which posits that what people are visually fixated on is closely related to what they are processing (Schindler and Lilienthal, 2019). Eye movement is typically an indication of a shift of attention and fixation duration is an indicator of the amount of attention being paid to an object (Pieters and Wedel, 2004). Thus, measuring eye

movements is a powerful way for determining what people are likely to notice and look at when exposed to marketing materials.

For the remainder of the paper, we first review the literature to develop hypotheses of how navigation bar design can influence behaviors of retail website visitors. Then the experimental design is described, results are presented, and findings are discussed. We then offer theoretical and practical implications. Lastly we discuss limitations and provide future research suggestions.

Literature review

Cognitive fit theory specifies that the fit between a task and how task information is represented will influence the speed and accuracy of problem-solving (Vessey, 1991). In the marketing literature, cognitive fit theory has been used to investigate consumer channel preferences (Brunelle, 2009), retailer shopping confusion (Garaus et al., 2015), attitudes towards companies practicing cause-related marketing (Gupta and Pirsch, (2006).

Cognitive fit and navigation bar product assortment

Active product category management is a way of determining the best fit between consumer expectations of what a brand should offer and what products are made available. Managing merchandise assortment allows retailers to customize offerings, and is an important dimension of retailing strategy (Varadarajan et al., 2010). Organizing product assortments online appropriately improves ease of navigation and shopping pleasure (Chang, 2011). A key feature of a successful e-commerce web site is the design of an interface that presents product information in a way that site visitors consider appropriate and expected (Hong et al., 2004). Product categories are typically displayed on a web site's navigation bar. In a study of how good website design facilitates web browsing, Tan and Wei (2006) find that a site's navigation bar is heavily relied upon and is a distinct landmark that makes it easier for users to form a cognitive map of what subsequent pages will look like. This makes the navigation bar a crucial element in an online retailer's servicescape.

It is expected that consumers will actively try to determine how a brand the extension fits with their existing brand schema. Consumer judgment of the fit between the parent brand and extension is the most important predictor of brand extension success (Volekner and Sattler, 2006). When the perceived fit is high, pre-existing brand associations should be reinforced (Montaner and Pina, 2009). However, when the perceived fit is low, brand dilution is likely to occur (Loken and John, 1993).

The review of the relevant literature suggests that visual processing of retailer sites with a high level of consistency among products presented on the navigation bar is likely to differ from those visual scanpaths of retailer sites with a lower level of consistency among products presented on the navigation bar.

Thus we hypothesize:

H1: Visual processing of a retailer home page will vary depending on the level of consistency present in the product categories included in the navigation bar.

Cognitive fit and navigation bar placement

Effective website design facilitates wayfinding, how easy it is for people to read a particular destination (Peponis et al., 1990). The first stage in accomplishing an online wayfinding task is successful cognitive mapping, in which a user processes and organizes information from past experiences and the website to form a mental map (Tan and Wei, 2006). When the design of a site is compliant with Web conventions, users can more easily form a cognitive map (i.e., cognitive fit), learn how to navigate a site (Tan and Wei, 2006), focus attention on site content (Nielsen and Loranger, 2006). Conversely, sites that violate web design standards and conventions are considered difficult to use (Nielsen and Loranger, 2006).

Navigation bars are almost always displayed horizontally at the top or vertically beginning in the top left, and retail sites typically present large features just below search and navigation functionality (Brewer et al., 2020). Murano and Oenga (2012) tested the impact of two navigation menu positions, one running vertically down the left hand side of the page with a fisheye menu running horizontally across the top for more specific viewing of menu items, and another running horizontally at the top of the page. They concluded that the two menu placements did not affect time-on-task, task accuracy, or perceptions. The fact that the authors did not find differences in these metrics for the two different placements may be due to the fact that these are both very common navigation bar placements. In other words, neither violates web design standards, nor consumer expectations. In our study we test a more unusual placement that we believe will be a greater challenge to what consumers are used to

Thus, we hypothesize:

H2: Visual processing of a retailer home page will vary depending on the placement of a navigation bar.

Cognitive fit, goal-directedness and navigation bar characteristics

The type of shopping goal is likely to affect the overall path that consumers take while navigating a site (Hui et al., 2009). Cognitive fit theory predicts that the fit between the presentation of goal information and the goal at hand will influence how quickly and accurately a user can solve problems (Vessey, 1991). In e-commerce research, two types of goal-directedness often considered are goal-directed shopping and experiential browsing; goal-directed behavior is guided by a specific goal while the aim of experiential browsing is to pass time or enjoy hedonic benefits (Ko, 2020). Another way of characterizing goal-directedness is by considering how users look for information. Goal-directed behavior is characterized by searching for information while browsing behavior is characterized by exploring information (Dames et al., 2019).

A goal-directed shopper may spend more time trying to make sense of a navigation bar whose product category assortment is not consistent than an experiential browser. Similarly, navigation bars that are not immediately found in their expected placement may be more detrimental to goal-directed shoppers than experiential browsers.

Thus, we hypothesize:

H3a: Goal-directedness will moderate the effects of product category assortment consistency present in the navigation bar on visual processing of a retailer homepage.

H3b: Goal-directedness will moderate the effects of navigation bar placement on visual

processing of a retailer homepage.

Design and Methodology

Our study was designed to examine the effects of navigation bar design characteristics on visual processing and how consumer goal-directedness interacts with navigation bar design characteristics to differentially affect visual processing. To test our hypotheses, we developed a simulated, online fashion retailer homepage.

Participants

Subjects were recruited through class announcements to undergraduate students at a large US University. Thirty-four subjects were recruited. Samples of 20 - 30 participants in neuroscience research studies are considered acceptable (Xu et al., 2023).

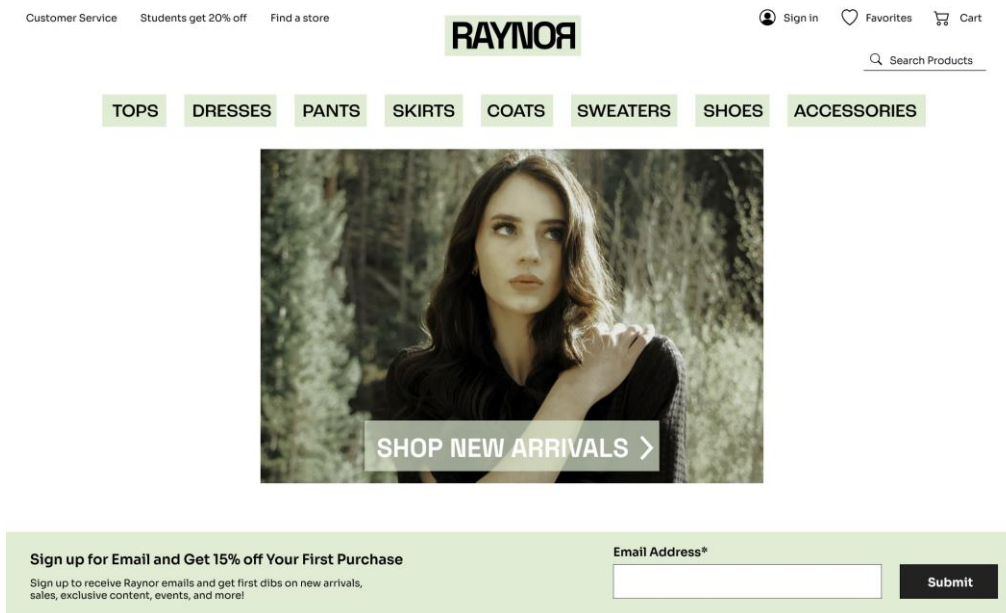
Stimuli

We conducted a pretest to determine the kinds of product categories that people would expect to see on the navigation bar of a clothing retail website. Based on that pretest we designed two different navigation bars, a consistent bar that included eight expected categories (tops, dresses, pants, skirts, coats, sweaters, shoes, accessories) and an inconsistent bar that included two unexpected categories and then six expected categories (posters, patio furniture, tops, dresses, pants, skirts, coats, sweaters) specifically. Thus the navigation bar with consistent product categories presented in the navigation bar represented a cognitive fit for consumers and the navigation bar with inconsistent product categories represented a lack of cognitive fit.

We also conducted a pretest to determine where users expected navigation bars to be placed in a clothing retail website. Based on that pretest we placed navigation bars in two different places, either running horizontally across the top of the page (most expected) or running vertically down the right hand side of the page (least expected). Thus the navigation bar placed horizontally at the top represented a cognitive fit for consumers and the navigation bar placed vertically on the right hand side represented a lack of cognitive fit.

Figure 1 shows one example of what our home pages looked like. In addition to the navigation bar, the homepage included a brand name at the top and a large photo of a model wearing an article of clothing, which is often a dominant image found at retail sites (Brewer et al., 2020).

Figure 1



Procedure

Participants were randomly assigned to one of the conditions of a 2 (product category presentation: consistent vs. inconsistent) x 2 (navigation bar placement: top-horizontal vs. right side- vertical) x 2 (goal-directedness: goal-directed shopping or experiential browsing) between-subjects design.

Goal-directedness was manipulated as follows. In the goal-directed shopping condition, each participant was told the following cover story before looking at the homepage:

You forgot your sister's birthday. You need to get something for her fast. You don't have a lot of money but you think you can afford a nice shirt. A friend of yours told you about a new boutique clothing site that they like. You want to check it out to see if it's a good place to buy the shirt.

In the experiential browsing condition, each participant was simply told to take a look at the homepage of a new boutique clothing site.

Eye tracking data was captured using the Tobii Pro X2-30 eye tracker.

Results

To analyze differences across the different home pages, we first created areas of interest (AOIs) in order to look at visual processing of specific areas of the home pages. The areas of interest were: 1) the navigation bar; 2) the three links in the upper left corner (Customer Service, Students get 20% off, Find a store); 3) the brand name (Raynor); 4) the three links with icons in the top right corner (Sign in, Favorites, Cart); 5) the search bar; 6) the picture of the model; 7) the call-to-action (Shop New Arrivals); 8) the discount information in the bottom left hand corner; and 9) the e-mail address capture section in the bottom right hand corner.

Only the first 20 seconds of each participant's viewing data were included in our analysis. This

was done in order to focus on the crucial first moments of each participant's viewing experience. The AOI that was looked at most quickly was the picture of the model (1.6 seconds), then the navigation bar (2.8 seconds), then the brand name (4.1 seconds). The fact that these three AOIs were looked at most quickly suggests that participants thought they were the most immediately important areas. Because of this, we chose to focus on these three AOIs for our analyses.

Analyses

The independent variables were consistency of product category assortment on navigation bar (consistent vs. inconsistent), navigation bar placement (horizontal-top of the page vs. vertical-right side of the page) and goal-directedness (goal-directed shopping vs. experiential browsing). Three dependent variables were measured: number of fixations in an AOI, number of revisits to an AOI (i.e., the number of times a participant fixated in an AOI, left, then came back and fixated again in that AOI) and total amount of time spent fixated in an AOI. These measures capture what participants were visually attending to and shifts of visual attention. For each AOI then, we ran an ANOVA on each of the three dependent variables

AOI1 - The navigation bar

Regarding visual processing of the navigation bar, there was a main effect for placement of the navigation bar on fixation count, $F(1, 26) = 11.75, p < .01$. People who saw the horizontal bar fixated more frequently on the navigation bar ($M = 17.86$) than did people who saw the vertical navigation bar ($M = 11.35$).

There was also a main effect for placement of the navigation bar on revisits to the navigation bar, $F(1, 26) = 20.87, p < .01$. Participants who saw the horizontal navigation bar revisited the navigation bar more frequently ($M = 4.36$) than participants who saw the vertical navigation bar ($M = 2.35$). In addition, there was a 2-way interaction effect between navigation bar placement and goal-directedness on revisits, $F(1, 26) = 11.85, p < .01$. The mean number of times participants in the goal-directed shopping condition revisited the navigation bar was similar whether the navigation bar horizontal ($M = 4$) or vertical ($M = 3.5$). However the mean number of times participants in the experiential browsing condition revisited the navigation bar differed depending on whether the navigation bar was horizontal ($M = 4.63$) or vertical ($M = 1.86$).

Lastly, there was a main effect for goal-directedness on amount of time fixated on the navigation bar, $F(1, 26) = 6.81, p < .05$. Participants in the goal-directed shopping condition spent significantly more time fixated in the navigation bar ($M = 5.8$ seconds) than participants in the experiential browsing condition ($M = 3.9$ seconds). In addition, a significant crossover interaction emerged between navigation bar placement and consistency of product category assortment on the navigation bar, $F(1, 26) = 6.0, p < .05$. Participants who saw the consistent product category assortment on the navigation bar spent more time fixated in the navigation bar presented vertically on the right hand side ($M = 4.8$ seconds) than when it was presented horizontally at the top ($M = 4.1$ seconds), while participants who saw the inconsistent product category assortment on the navigation bar spent more time fixated in the navigation bar presented horizontally at the top ($M = 5.8$ seconds) than when it was presented vertically on the right hand side ($M = 3.2$ seconds).

AOI2 - The picture of the model

Regarding visual processing of the picture of the model, there were no differences in how frequently participants fixated on the model, how many times participants revisited the picture of the model, or the total amount of time spent fixated on the model.

AOI3 - The brand name

Regarding visual processing of the brand name, there were no differences in the number of fixations on the brand name or number of revisits to the brand name. There was a main effect for navigation bar placement on the amount of time spent fixated on the brand name, $F(1, 22) = 9.04, p < .01$. Participants who saw the horizontal navigation bar spent less time fixated on the brand name ($M = .72$ seconds) than participants who saw the vertical navigation bar ($M = 1.15$ seconds).

Summary of results

Although we found a crossover interaction between product category assortment consistency and navigation bar placement, we found no main effects for product category assortment consistency. Thus, H1 was not supported. We found two main effects for navigation bar placement on visual processing of the navigation bar and a third main effect for navigation bar placement on visual processing of the brand name. Thus, H2 was supported. Lastly, we found no interaction effect between goal-directedness and product category assortment consistency on visual processing, but we did find an interaction effect between goal-directedness and navigation bar placement on visual processing. Thus, H3a was not supported, but H3b was supported.

Discussion

We found that people looked at the navigation bar more than twice as quickly when it appeared horizontally at the top of the page than when it appeared vertically on the right hand side of the page. Also, participants fixated more frequently in the horizontal bar than the vertical bar. It was also the case that participants revisited the horizontal navigation bar more frequently than they did the right-hand side vertical navigation bar. Compared to the right-hand side vertical navigation bar, which is not a common place to find a navigation bar, participants used the more common horizontal bar more, both right away and across their visit.

Although the model picture was the first thing visually attended, we found that visual processing of the picture was not affected by navigation bar placement, product assortment presentation, or consumer goal-directedness. This suggests that although pictures of models on retail sites may attract immediate attention, they do not necessarily affect how much attention consumers pay to other site elements, nor the path that consumers take in attending to those elements.

We also found that where the navigation bar appeared affected how much time consumers spent looking at the brand name. We suspect that consumers who saw the navigation bar at the top of the page likely also saw the brand name in their periphery, and decided it was not important to look at it directly. A recall task would have confirmed that these consumers may have known there was a brand name there but might not know what that brand name was. The brand name was further away from the navigation bar that appeared on the right hand side of the page. For consumers who saw that navigation bar placement it was important to visually identify the brand name so they spent longer looking at it.

Implications

For researchers, the potential of eye tracking for marketing research is still growing but is likely to be a part of mainstream marketing studies in the near future. This may be especially so in the case of retail website design, as our understanding of e-servicescapes remains largely limited (Wu, Quyen and Rivas, 2017). “Because Web design combines static and dynamic visual features, and requires consumers to engage in search, choice, and scene perception tasks often simultaneously, it could become a fertile ground for testing and applying integrative theories of the human perception–action cycle and its implications for marketing” (Wedel and Pieters, 2017, 139). In the case of our project, we shed light on how visual processing of an important design element, the navigation bar, affects the user experience, using cognitive fit theory to develop our predictions.

For marketers, they must struggle to continually refine their product category breadth online to match visitor evolving expectations, but they also must be sensitive to not alienating current customers who have grown accustomed to the product set presented at a website, typically in the site’s navigation bar. Our research suggests that consumers are not affected by the addition of new product categories that stray from a brand's typical set of offerings. Also, marketers should include navigation bars in their design testing. Navigation bar placement appears to influence not only how consumers use that navigation bar but also how they navigate other elements at the site.

Limitations and Future Research

Although we found support for the two of our four hypotheses, we suspect that our study is underpowered and we intend on gathering data from more participants. Also, we constrain our investigation to the three AOIs that consumers looked at first. There were six more AOIs that were looked at later. It may be that navigation bar placement, product category assortment consistency and goal-directedness affect consumer paths that include some of those AOIs as well. Lastly, we tested only one website design. Future research should include other elements that vary on different dimensions. For example, the hero image of the model in our design was very large compared to other elements. It might be that it had an outsized effect on visual processing of other elements, and that a smaller image would lead to different effects.

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Track: Consumer Behavior

ID#: 1773

A Note on Perceptions of Direct Selling

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Introduction

It is axiomatic that perceptions often determine reality. For example, companies that are perceived negatively likely experience difficulty in attracting and retaining customers, capable managers, and investors (e.g., Kim, Overton, Hull, & Choi 2018; Stevens 2013). Similarly, student enrollment in and satisfaction with academic disciplines such as marketing are driven in part by perceptions (e.g., Allen, Kumar, Tarasi, & Wilson 2014; Atkin, et al. 2022; Cobb-Walgren, Pilling, & Barksdale 2017).

This manuscript addresses perceptions of one instantiation of marketing by the general public and college students. More specifically, the manuscript presents the results of two surveys that investigated the familiarity and impression of national samples of the general public and college students with direct selling, multi-level marketing, and social selling. Whereas direct selling is considered a generic term, multi-level marketing is a frequently maligned subset of direct selling, and social selling is a term being considered as an alternative to that of direct selling by a cadre of direct selling companies. A split-ballot research protocol was employed that permitted comparing perceptions of the three terms as well as comparing perceptions of the general public and college students.

There is a virtual paucity of research-based information on direct selling. Analogous to marketing (e.g., Dalsace & Markovitch 2009), what seems to be “known” about direct selling is primarily derived from anecdotal evidence and individual experiences reported in the news media or on social media. It is important to know and understand the public’s perceptions of direct selling since perceptions influence the probability of purchasing from direct selling companies and the probability of individuals becoming direct sellers. Moreover, perceptions form the basis of public policy, and public policy affects direct selling. See, for instance, the FTC rule-making process for defining a direct seller. It is also important to know and understand the perceptions of college students regarding direct selling for similar reasons. Consequently, the research reported here provides generalizable insights into direct selling perceptions that should prove useful to direct sellers and their direct selling companies as well as prove helpful in informing public policy about direct selling.

The manuscript proceeds by first providing an overview of direct selling. It then presents the research methodology used and the results of the two surveys. The following sections respectively discuss the research methodology employed, the results of the research, and the implications of the research.

Direct Selling

Over time, direct selling has been variously characterized as a personal selling activity (e.g., Buell 1954), a business model (e.g., Keep & Vander Nat 2014), a channel of distribution (e.g., Duffy 2005; Enis 1992), and an industry (e.g., Granfield & Nicols 1975). Regardless of how it has been characterized, direct selling is most likely the first instantiation of marketing writ large.

For example, Alturas & Santos (2009, p. 49) wrote that “...direct selling is the oldest retailing channel known to mankind.”

Consistent with the above characterizations, Peterson and Wotruba (1996, p. 6) offered a three-tiered perspective of direct selling. They opined that direct selling can logically be addressed from an operational perspective, a tactical perspective, and/or a strategic perspective:

Operationally, direct selling can be treated as a form of interpersonal communication or personal selling. From a tactical perspective direct selling can be considered a way of organizing sales activities and the selling function. Strategically, direct selling can be viewed as a channel or mode of distribution, a means of gaining access to a market, or a way of doing business.

In brief, partially because of the different ways in which it has been viewed, and partially due to its nature, direct selling is perhaps one of the most misunderstood embodiments of marketing. Indeed, no agreed upon definition of direct selling exists other than it is a particular form of nonstore retailing (that is, direct business-to-consumer selling). As such, the absence of physical retail locations results in direct selling being “invisible.” According to the website of the Direct Selling Association, an industry trade association, in 2023 there were more than 1,000 direct selling companies and more than six million individuals who were active direct sellers in the United States (www.dsa.org). Most of these direct sellers were independent contractors (gig workers) who worked part-time to earn incremental income.

Consequently, given the informational lacune surrounding direct selling, the primary purpose of the present research was to empirically examine the perceptions of two segments of society regarding direct selling—the general public and college students. College students were viewed as pre-career individuals who would someday constitute direct selling customers or even direct sellers. Through this examination, insights into direct selling were obtained that clarify the public’s understanding of it and provide guidance to anyone or any entity with an interest in direct selling. companies. The next section of the manuscript distinguishes between two types of direct selling and briefly highlights the type of direct selling that seems to be the most widely reported in the news and social media.

Types of Direct Selling Organizations

Direct selling organizations consist of two general types, single-level direct selling organizations and multi-level direct selling organizations. As per the nomenclature, single-level direct selling organizations, sometimes referred to as “flat” organizations, have only one level of direct sellers between a direct selling company and customers of the company. Multi-level direct selling organizations incorporate a hierarchy of direct sellers whose structure oftentimes resembles a visual pyramid. Multi-level direct selling organizations, which are sometimes termed network marketing organizations or multi-level marketing (“MLM”) organizations, comprise more than three-quarters of all direct selling organizations in the United States.¹

¹ Technically multi-level marketing refers to a method of compensation. However, in this manuscript the vernacular usage will be followed. See, for instance, Coughlan & Grayson (1998).

In a multi-level direct selling organization, independent contractor direct sellers both sell company products and/or services and can recruit other individuals to be independent contractor direct sellers. Theoretically, a given direct seller can recruit other individuals to be direct sellers, who in turn can recruit additional individuals to be direct sellers, who then can recruit more individuals to be direct sellers, and so forth, creating a sort of hierarchical structure or “downline.” In addition to earning income through his or her own sales, a direct seller can earn a commission on the sales of other direct sellers that he or she recruited.

Multi-level Marketing

Although millions of direct sellers work for multi-level direct selling organizations and enjoy doing so, the term “multi-level marketing” itself has come to be commonly used in a derogatory or even pernicious manner. Indeed, with few exceptions (e.g., Peterson & Albaum 2011), the news media in general, social media, and academic publications in particular have come to equate multi-level marketing with direct selling and have derided individuals and companies engaged in multi-level direct selling as universally exploitive, unethical, and frequently carrying out illegal activities (e.g., Herbig & Yelkurm 1997; Vander Nat & Keep 2002). Examples of academic treatises critical of multi-level marketing include the following articles:

- “Multilevel marketing and pyramid schemes in the United States: An historical analysis” (Keep & Vander Nat 2014)
- “The role of the distributor network in the persistence of legal and ethical problems of multi-level marketing companies” (Groß & Vriens 2019)
- “Let’s get rich: Multilevel marketing and the moral economy in Siberia” (Schiffauer 2018)
- “Multilevel marketing diffusion and the risk of pyramid scheme activity: The case of Fortune Hi-Tech Marketing in Montana” (Bosley & McKeage 2015)
- “Ethical issues in multilevel marketing: Is it a legitimate business or just another pyramid scheme?” (Muncy 2004)

As previously noted, although there is a plethora of negative perceptions of multi-level direct selling companies and individuals engaged in direct selling in the United States, there is virtually no objective information as to how they are perceived by the general public or college students. While a limited study of the public’s perceptions of direct selling has been conducted in Sydney and Melbourne, Australia (Kustin & Jones 1995), and respective investigations regarding public perceptions of direct selling in 11 European countries (Federation of European Direct Selling Associations 1993) and eight countries including Finland, South Africa, and Taiwan (Brodie, Albaum, Chen, Garcia, Kennedy, Msweli-Mbanga, Oksanen-Ylikoski, & Wotruba 2004), no broad-based, systematic inquiry into public perceptions of direct selling in the United States exists. The present research consisted of such an inquiry.

The Studies

The present investigation of direct selling perceptions consisted of two components. One component consisted of reanalyzing survey data from a national sample of the general public reported by Peterson and Peterson (2022). A second component consisted of surveying a

national sample of college students.² Both surveys utilized the internet when collecting data, and both followed the same general research approach. Data for both surveys were collected during the COVID pandemic.

To provide a context for studying and interpreting perceptions, three terms served as stimuli: “direct selling,” “multi-level marketing,” and “social selling.” Direct selling is the most general of the three terms, whereas multi-level marketing is a specific type of direct selling. Social selling is being used by some direct selling companies in an attempt to avoid the stigma associated with multi-level marketing and be a more appropriate description of their sales process. It was included in the present study to serve as a stimulus to compare and interpret responses to the other two terms.

Research Methodology

According to Peterson and Peterson (2022), their general public survey was conducted through an online commercial consumer panel company. Potential survey participants were screened using several selection criteria including whether they were 18 years of age or older, resided in the United States, and agreed to follow survey instructions. A total of 1,534 panel members participated in the survey. Of these individuals, 53 percent were male, 39 percent were 18-34 years of age, 33 percent were 35-54 years of age, and 28 percent were 55 years of age or older; none were college students. Forty-nine states and the District of Columbia were represented in the sample.

The student survey was conducted by asking selected colleagues to administer a questionnaire to classes at their college or university. Specifically, colleagues were asked to forward a survey link to their students and share the link with their respective colleagues and former doctoral students and encourage them to also forward a link to their students. The goal was to obtain as broad a sample as possible to increase the generality of the sample. The final student sample consisted of 2,013 college students from more than three dozen public (79%) and private (21%) colleges and universities and 1700+ different home address zip codes.³ Approximately 71% of the students were juniors or seniors, and a substantial majority (84%, as would be expected) were business students. Male and female students were equally represented; 65 percent of the students were between the ages of 20 and 22. About 61 percent reported having either a part-time or full-time job.

The research methodology employed in both surveys was an online split-ballot (experimental) protocol.⁴ After being qualified, survey participants were randomly assigned to one of three independent treatment conditions. In one condition survey participants were exposed to the term “direct selling.” In the second condition, survey participants were exposed to the term “multi-level marketing.” In the third condition, survey participants were exposed to the term “social selling.”

² The college student survey methodology was approved by the University of XXXX Institutional Review Board, and all student survey participants completed a consent form prior to answering questions.

³ Because student responses were confidential, it was not possible to link all survey participants to a particular college or university.

⁴ To maximize the comparability of the two samples, the student survey replicated the research methodology employed by Peterson and Peterson (2022). As such, the student survey can be viewed as a partial replication of their general public survey.

Regardless of sample, survey participants were first asked two identical closed-end questions, one about their familiarity with their assigned term (direct selling/multi-level marketing/social selling), and one about their positive or negative impression of their assigned term. The familiarity question was, “Using a scale of being very familiar to being not familiar at all, how familiar are you with the term [Direct Selling/Multi-level Marketing/Social Selling]?” Survey participants answered the question using a four-category rating scale (“very familiar,” “familiar,” “unfamiliar,” and “not familiar at all”). The impression question was, “On a scale of being very positive to being very negative, what impression did you receive about [Direct Selling/Multi-level Marketing/Social Selling]?” Response categories for the impression question were “very positive,” “positive,” “neutral,” “negative,” and “very negative.”

Results

Table 1 contains percentage responses that indicate the reported familiarity of the two samples with the study terms. In addition, the table contains the mean response to each term as well as the number of survey participants exposed to the term. Note that although survey participants in each sample were randomly assigned to each study term, the final subsample sizes differ a bit due to noncompleted questionnaires, terminations, and so forth.

Table 1 About Here

Three major findings emanate from the table. First, as expected, survey participants in both samples were most familiar with the term “direct selling” and least familiar with the term “social selling.” This finding intuitively supports the validity of the research since “social” selling” is not presently associated with the two more frequently used terms. Second, there is a larger difference between direct selling familiarity and social selling familiarity for college students than for the general public. Whereas 62 percent of the college students exposed to the direct selling term stated they were familiar with it, 38 percent of the college students exposed to social selling term indicated familiarity with it, a “gap” of 24 percent. The corresponding “gap” for the general public was 15 percent. Third, while the two samples reported similar familiarity with the direct selling term, there was a significant difference ($p < .01$) in familiarity perceptions for multi-level marketing, with college students reporting a greater level of familiarity than the general public.

On average, male survey participants reported being more familiar with all three assigned terms than did female survey participants. Across the three terms, 58 percent of the males in the general public sample and 57 percent of the males in the college student sample stated they were familiar with the terms, whereas 45 percent of the females in the general public sample and 50 percent of the females in the college student sample stated they were familiar with the terms. The respective differences were statistically significant at $p < .01$.

Table 2 contains impression percentages for the two samples as well as the means for the rating scales and their underlying sample sizes. Note that the responses in Table 2 are based on only those survey participants who indicated they were familiar with the term to which they were exposed. Three findings emerge from the table. First, the general public has a more favorable impression of all three terms than do college students. Second, social selling has the most

favorable impression of the three terms, especially among general public survey participants. Third, multi-level marketing is perceived the least favorably of the three terms by both samples.

Table 2 About Here

Implications

The implications of the present investigation are straightforward. In particular, the relationship between familiarity perceptions and impression perceptions is shown visually in Figure 1 for the two samples. Based on mean responses for the two perceptions, the figure suggests that the direct selling term is perceived the most favorably: it possesses the greatest familiarity and the second-most positive impression by the general public. More specifically, combining the two perceptions reveals that 36 percent of the general public sample is familiar with and possesses a positive impression of direct selling. In contrast, 20 percent of the college student sample is familiar with and possesses a positive impression of social selling.

Figure 1 About Here

To the extent that the direct selling firms wish to attract college students as customers and or direct sellers, it would seem to be an especially difficult task given their combined levels of familiarity and positively regarding the dominant type of industry firm, multilevel marketing companies. This does not bode well for the future of the direct selling industry. Changing perceptions can be resource intensive and time-consuming.

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Table 1. Familiarity with Terms “Direct Selling,” “Multi-level Marketing,” and “Social Selling”

Response	Term					
	<u>Direct Selling</u>		<u>Multilevel Marketing</u>		<u>Social Selling</u>	
	Public	Student	Public	Student	Public	Student
Very Familiar	21.9%	12.6%	18.4%	9.6%	19.4%	5.8%
Familiar	38.2%	49.6%	30.1%	51.2%	25.9%	32.6%
Unfamiliar	28.1%	30.7%	31.9%	34.2%	29.0%	46.3%
Not Familiar at All	11.8%	7.1%	19.6%	5.0%	25.7%	15.3%
Mean ¹	2.7	2.7	2.5	2.7	2.4	2.3
N	566	661	489	644	479	708

¹ The larger the mean, the more familiar a term is.

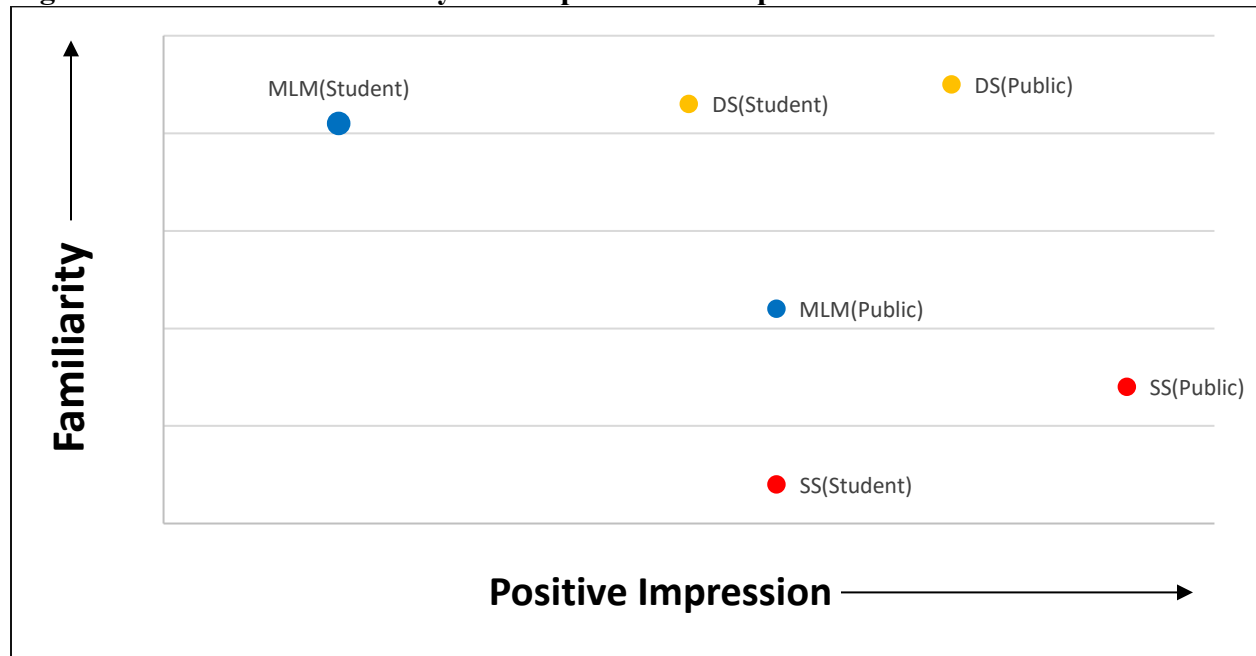
Table 2. Impression of Terms “Direct Selling,” “Multi-level Marketing,” and “Social Selling”¹

Response	Term					
	Direct Selling		Multilevel Marketing		Social Selling	
	Public	Student	Public	Student	Public	Student
Very Positive	22.4%	5.9%	25.3%	3.5%	31.8%	8.0%
Positive	37.4%	41.1%	29.1%	35.2%	39.2%	44.9%
Neutral	32.4%	42.7%	27.0%	32.1%	23.0%	40.7%
Negative	4.7%	9.7%	11.4%	18.4%	3.2%	4.8%
Very Negative	3.1%	0.6%	7.1%	10.8%	2.8%	1.6%
Mean ²	3.7	3.4	3.5	3.0	3.9	3.5
N	340	411	237	392	217	272

¹ Only the responses of survey participants reporting they were familiar with their assigned terms are contained in this table.

²The larger the mean, the more positive the impression of a term.

Figure 1. Familiarity and Impression Perceptions.¹



¹DS is Direct Selling, MLM is Multi-level Marketing, SS is Social Selling

Exploring the Impact of Online Reviews Perceived Trustworthiness and Consumer Engagement on Buying Behaviors

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Abstract

This study investigates the impact of perceived trust in online reviews, the frequency of reading reviews, and the interest created by reviews on consumers' purchase decisions. A survey of 201 participants was conducted to measure these variables and their influence on brand advocacy and various stages of the customer journey. The results revealed that while the frequency of reading online reviews was not a significant predictor of purchase decisions, perceived trust in online reviews significantly predicted purchase decisions ($\beta = 0.38, p < .001$). Furthermore, there was a significant interaction effect between the frequency of reading reviews and the interest created by reviews on purchase decisions ($F(1, 10) = 8.25, p = .02$). These findings suggest that while the frequency of reading reviews alone does not directly influence purchase decisions, the combined effect of frequent review reading and high interest in reviews significantly impacts consumer behavior. This study contributes to the existing literature on consumer behavior in online shopping and offers practical implications for marketers and e-commerce platforms aiming to leverage online reviews to drive sales.

Keywords: Online Reviews, Customer's Journey, Perceived Trust, Online Shopping, Consumer Decision-Making, Online Sales

Relevance to Marketing Educators, Researchers, and/or Practitioners: The results of this study provide valuable insights into how online reviews influence consumer decision-making processes, emphasizing the critical role of perceived trust. Findings can assist marketers in designing effective digital marketing strategies that can lead to improved customer satisfaction, increased sales, and more robust brand advocacy, ultimately enhancing the overall effectiveness of online marketing efforts.

Introduction

Online shopping has become fundamental to consumer convenience in an increasingly digital world. Over the past two decades, major e-commerce platforms like Amazon, Wayfair, and eBay have revolutionized shopping experiences. With over one-third of the world's population shopping online, eCommerce has grown into a \$6 trillion industry and is projected to reach \$8 trillion by 2027 (Statista, 2024). Approximately 2.71 billion people worldwide purchase online through dedicated eCommerce platforms or social media stores (Sellers Commerce, 2024, May 14). Additionally, online marketing research indicates that consumers shop online for the benefits of product variety, convenience, promotions, personal preferences, peer influence, psychological aspects, and personalization, all contributing to increased brand loyalty (Chang, 2011; Sen et al.,

2024; Senecal & Nantel, 2004), however, the inability to examine products before purchase poses a significant challenge.

Consumers often rely on online reviews from previous buyers to make informed decisions. The increasing problem of fake reviews presents a challenge for consumer decision-making. A recent study reported that 54% of Amazon customers were confident they had read a fake review on the site in 2023 (BrightLocal, 2024). Most studies investigate the relationship between positive online reviews and customer satisfaction (Quan et al., 2023). Acknowledging the prevalence of fake reviews, this study advances the field by examining how the perceived trustworthiness of online reviews influences consumer purchasing decisions.

Literature Review

Online reviews are a powerful tool for influencing consumer behavior and purchasing decisions. They provide critical information that helps consumers make informed choices, reduce uncertainty, and enhance customer satisfaction (Quan, 2023; Senecal & Nantel, 2004). Principal highlights for online review statistics reveal that 93% of users say online reviews impact their buying decisions, and 84% consider reviews trustworthy (Synup, 2024, April 24). Online reviews provide valuable insights into product quality and consumer experiences, shaping buying decisions. Positive and negative reviews impact consumer behaviors within online shopping environments, with negative reviews often having a more substantial effect due to their perceived informativeness (von Helversen et al., 2018; Purnawirawan et al., 2012). However, the prevalence of fake reviews complicates the information's reliability, necessitating consumers' careful consideration (Taylor, 2019; Schoolov, 2020).

Perceived Trust

Trust in online reviews is essential for their effectiveness. Consumers rely on reviews to mitigate uncertainty about a product, especially when they cannot physically examine it. Reliable reviews help consumers make informed decisions, while fake reviews can mislead and negatively impact purchasing choices (Constantinides & Holleschovsky, 2016; Dhahak & Huseynov, 2020). Tian (2023) investigated predictors of perceived trust for consumer intention, specifically online virtual wallet systems. Using foundational elements of the technology acceptance model (TAM) and theory of planned behavior (TPB) combined with the partial least square-structural equation model (PLS-SEM) approach to analyze complex relationships between observed and latent variables found no correlation to perceived trust and use.

However, another study by Wu and Huang (2023) on online shopping live-streaming found that consumers perceived utilitarian, hedonic, and social values positively impacted their trust in the live-streamers they followed and purchased from (p.12). Li et al. (2023) studied extensively online reviews' impacts on the restaurant industry and owner success. The researchers found a positive correlation, regardless of how users engage with online reviews, and suggested that the industry must take them seriously and closely monitor review platforms. Quan et al. (2023) further this sentiment, suggesting online store owners should value online reviews. The authors found that online reviews significantly impacted customer satisfaction and provided businesses with critical insights into the advantages and disadvantages of their products. They also found that the number of reviews read by consumers did not have an impact, but the quality of the review benefited online shoppers more (Quan et al., 2023).

Fake Reviews

The evolving understanding of fake reviews has shed light on their complex role in shaping consumer behavior, particularly online purchases. Bae et al. (2023) demonstrated that the influence of fake reviews varies depending on product type and brand awareness. This conclusion is supported further by the research of Song et al. (2023), which found that fake reviews are less impactful when a brand is well-known. Both studies reveal that while fake reviews do not significantly alter consumer intentions for established brands, they can decrease purchase intentions for lesser-known brands, highlighting the protective effect of brand awareness. These insights are crucial for marketers and regulators, emphasizing the importance of maintaining review authenticity and understanding its broader implications on consumer-perceived trust and decision-making.

Frequency and Interest of Reading Reviews

Frequency

Consumers often turn to online reviews to assist with purchasing decisions, which also requires consumer involvement. Chevalier and Mayzlin (2006) highlighted the significance of review valence and volume, illustrating how the frequency of reading reviews can influence consumer interest and purchasing behavior. Furthermore, Pan and Zhang (2011) found that frequently reading detailed and well-articulated reviews enhances consumer interest and significantly influences purchasing decisions.

However, Zhu et al. (2016) explored the impact of online consumer reviews on new product sales, focusing on the number and quality of reviews. They found that while review quality significantly influenced purchasing decisions, the frequency of reading reviews had no substantial impact, indicating that consumers prioritize the depth and credibility of reviews over sheer frequency. Consumers frequently rely on online reviews when navigating the online shopping space. However, findings suggest that the mere frequency of reading reviews does not necessarily translate into purchase decisions (Hong et al., 2017; Lin et al., 2019; Xie et al., 2019).

Interest

Filieri et al. (2015) explored the factors that led travelers to trust TripAdvisor reviews. The study found that the perceived usefulness and enjoyment of reading reviews significantly influenced the adoption of recommendations. This suggests that when consumers find reviews interesting and engaging, they are more likely to trust the information and make purchase decisions based on it. Most studies have predominantly focused on the valence of online reviews, examining whether the reviews were positive or negative (Ketelaar et al., 2015). This emphasis provides an opportunity to explore and contribute to existing research by better understanding the role of interest in purchasing intent.

The Customer's Journey

Customer journeys describe the interactions between consumers and brands over time and can lead to long-term relationships (Maechler et al., 2016). Many frameworks detail the customer journey process, and journey mapping has gained popularity as it allows brands to deliver the appropriate messaging at any stage of the customer journey. This approach enables brands to

interact seamlessly with consumers at various touchpoints (Lemon & Verhoef, 2016).

In order to establish a specific context, the researchers utilized HubSpot's customer journey framework, which includes the awareness and consideration stages. However, in this study, the final stage of the journey, typically referred to as the decision stage, is labeled as the purchase stage. According to Sellers (2022), HubSpot's framework describes the awareness stage as the phase where consumers recognize a problem and seek information to solve it; the consideration stage involves consumers evaluating potential solutions but not being ready to purchase; finally, in the decision stage, consumers have decided on their solution and are ready to purchase.

Understanding and optimizing the customer's journey from the buyer's perspective is crucial for marketers (Li et al., 2023; Martin et al., 2021). This process encompasses the entire consumer experience, from recognizing a need to receiving and evaluating the product. Online reviews play a pivotal role in the customer's journey, particularly in the purchase stage, where consumers make decisions based on many factors, including the information gathered from reviews. Purnawirawan et al. (2012) conducted a study evaluating the perceived usefulness of online reviews based on accessible diagnostic theory. The investigation revealed that, for online reviews to impact the purchasing stage positively, there needed to be a balance of positive and negative reviews. This finding was supported previously by Chevalier and Mayzlin (2006) in their study on the impact of online reviews on book sales. They found that while positive reviews significantly increase book sales, negative reviews also have a significant, although less pronounced, impact, highlighting the importance of a balanced review environment. This balance was perceived as relevant as consumers entered the final stage of the customer journey. Additionally, von Helversen et al. (2018) found that reviews can significantly influence the final decision, either facilitating a confident purchase or deterring the consumer.

Research Problem

To what extent does perceived trust in online reviews, the frequency of reading these reviews, and the interest created by these reviews influence various stages of the customer's journey process, including consumer purchase decisions in an online shopping environment?

This research problem investigates four key aspects: (1) Perceived trust in online reviews: understanding how trust in the information provided by online reviews affects the customer's journey. (2) Frequency of reading reviews: examining how often consumers read online reviews and how this frequency impacts their purchase decisions. (3) Interest created by reviews: assessing how the interest generated by reading online reviews influences consumers' final purchase decisions and brand advocacy. (4) Interaction effects that examine the frequency of reading reviews, the interest garnered from this activity, and their impact on consumer behavior.

Purpose of the Study

This study seeks to provide comprehensive insights into how online reviews influence consumer behavior, thereby offering valuable information for businesses to optimize their online marketing strategies and enhance consumer engagement. The findings will also contribute to the existing literature on consumer behavior from the perspective of online shopping, providing practical implications for marketers and e-commerce platforms seeking to leverage online reviews to drive

sales.

Methodology

Research Question

How do the frequency of reading online reviews, the interest generated by these reviews, the perceived trust in reviews and the interaction effects in these reviews influence consumers' purchase decisions in online shopping environments?

Hypothesis

- H1: The frequency of reading online reviews significantly predicts purchase decisions.
- H2: The interest created by online reviews significantly predicts purchase decisions.
- H3: Perceived trust in online reviews significantly predicts purchase decisions.
- H4: There is a significant interaction effect between the frequency of reading reviews and the interest created by reviews on purchase decisions.

Independent Variables

- Frequency of reading reviews: measured on a scale from 1 (Very Frequently) to 6 (Never).
- Interest created by reviews: measured on a scale from 1 (Strongly Agree) to 5 (Strongly Disagree).
- Perceived trust in online reviews: measured on a Likert scale.
- Interaction Term: the interaction between the frequency of reading reviews and the interest created by reviews.

Dependent Variable

- Purchase decisions: measures the decision to purchase based on various factors.

Population Sample

This study involved the participation of 201 individuals who were 18 or older and engaged in online shopping. The participants were solicited through posts placed on various social media sites.

Framework

This study investigates the impact of perceived trust in online reviews, the frequency of reading reviews, and the interest created by reviews on consumers' purchase decisions. By incorporating interaction terms, we seek to understand how these factors jointly influence consumer behavior. An approved qualitative survey with 30 questions, utilizing Likert scales, was approved by the Institutional Review Board (IRB). Basic demographic information was collected, specifically gender and income. The survey instrument included questions designed to measure the impact of perceived trust in online reviews. Respondents completed the survey online.

Results

The following sections provide a comprehensive analysis of data collected from 201 participants, describing the crucial role of perceived trust in online reviews in influencing brand advocacy in the customer's journey, focusing on purchase intent.

Descriptive statistics were calculated for gender and annual household income. The sample consisted of 113 males and 88 females. The most frequently reported income brackets were "\$0 – \$9,999" and "\$100,000 or more" (see Table 1).

Table 1. Gender and Annual Household Income

Gender	Frequency
Male	113
Female	88
Income Bracket	
\$0 – \$9,999	37
\$10,000 – \$19,999	17
\$20,000 – \$29,999	15
\$30,000 – \$39,999	9
\$40,000 – \$49,999	9
\$50,000 – \$59,999	13
\$60,000 – \$69,999	8
\$70,000 – \$79,999	9
\$80,000 – \$89,999	0
\$90,000 – \$99,999	9
\$100,000 or more	55
No income or limited	20

Table 1 highlights the distribution of gender and annual household income within the sample. The sample is composed of 113 males and 88 females. The most frequently reported brackets were "\$0 – \$9,999" and "\$100,000 or more." This disparity suggests a potential separation in the sample, with many respondents either at the lower or upper ends of the income range.

Perceived Trust in Online Reviews and Brand Advocacy

A linear regression was conducted to predict brand advocacy based on perceived trust in online reviews, gender, and income. The results of the regression indicated that the model explained a significant proportion of variance in brand advocacy, $R^2 = .18$, $F(3, 197) = 14.31$, $p < .001$. The regression coefficients are presented in Table 2.

Table 2. Regression Analysis Predicting Brand Advocacy Based on Perceived Trust in Online Reviews, Gender, and Income

Predictor	B	SE	β	t	p
(Constant)	3.00	0.51		5.88	< .001
Trust in Online Reviews	0.44	0.09	0.37	5.01	< .001
Gender (Male=1, Female=0)	0.19	0.22	0.08	0.86	0.391
Income (numeric)	0.05	0.03	0.12	1.82	0.070

The regression results indicate that perceived trust in online reviews significantly predicts brand advocacy ($\beta = 0.37$, $p < .001$), suggesting that higher perceived trust in online reviews is associated with increased brand advocacy. The constant term ($B = 3.00$, $p < .001$) represents the baseline level of brand advocacy when perceived trust in online reviews, gender, and income is zero. Gender and income were not significant predictors; however, income approached significance ($p = .070$).

Perceived Trust and Awareness Stage of the Customer's Journey

A linear regression was conducted to predict awareness based on perceived trust in online reviews, gender, and income. The regression results indicated a significant proportion of variance in awareness, $R^2 = .17$, $F(3, 197) = 13.25$, $p < .001$. The regression coefficients are presented in Table 3.

Table 3. Regression Analysis Predicting Awareness Based on Perceived Trust in Online Reviews, Gender, and Income

Predictor	B	SE	β	t	p
(Constant)	3.15	0.54		5.83	< .001
Trust in Online Reviews	0.42	0.09	0.36	4.62	< .001
Gender (Male=1, Female=0)	0.20	0.23	0.08	0.87	0.383
Income (numeric)	0.07	0.03	0.15	2.22	0.027

The regression results indicate that perceived trust in online reviews significantly predicts awareness ($\beta = 0.36$, $p < .001$), suggesting that higher perceived trust in online reviews is associated with elevated brand, product, or service awareness. The constant term ($B = 3.15$, $p < .001$) represents the baseline level of awareness. Income is also a significant predictor ($\beta = 0.15$, $p = .027$), indicating that higher income levels are associated with greater awareness. Gender was not a significant predictor.

Perceived Trust and Consideration Stage of the Customer's Journey

A linear regression was conducted to predict consideration based on perceived trust in online reviews, gender, and income. The regression results indicated significant variance in consideration, $R^2 = .18$, $F(3, 197) = 14.31$, $p < .001$. The regression coefficients are presented in Table 4.

Table 4. Regression Analysis Predicting Consideration Based on Trust in Online Reviews, Gender, and Income

Predictor	B	SE	β	t	p
(Constant)	3.20	0.56		5.71	< .001
Trust in Online Reviews	0.38	0.10	0.33	4.10	< .001
Gender (Male=1, Female=0)	0.22	0.24	0.09	0.92	0.360
Income (numeric)	0.06	0.03	0.14	2.10	0.037

The regression results indicate that perceived trust in online reviews significantly predicts consideration ($\beta = 0.33$, $p < .001$), suggesting that higher perceived trust leads to higher consideration. The constant term ($B = 3.20$, $p < .001$) represents the baseline level of consideration. Income also emerged as a significant predictor ($\beta = 0.14$, $p = .037$), indicating that higher income levels are associated with greater consideration. Gender was not a significant predictor.

Perceived Trust in Online Reviews and Purchase Intent

A linear regression was conducted to predict purchase intent based on perceived trust in online reviews, gender, and income. The regression results indicated a significant proportion of variance in purchase intent, $R^2 = .16$, $F(3, 197) = 12.31$, $p < .001$. The regression coefficients are presented in Table 5.

Table 5. Regression Analysis Predicting Purchase Intent Based on Perceived Trust in Online Reviews, Gender, and Income

Predictor	B	SE	β	t	p
(Constant)	3.20	0.56		5.71	< .001
Trust in Online Reviews	0.38	0.10	0.33	4.10	< .001
Gender (Male=1, Female=0)	0.22	0.24	0.09	0.92	0.360
Income (numeric)	0.06	0.03	0.14	2.10	0.037

The regression results indicate that perceived trust in online reviews significantly predicts purchase intent ($\beta = 0.33$, $p < .001$), suggesting that higher perceived trust in online reviews is associated with higher purchase intent. The constant term ($B = 3.20$, $p < .001$) represents the baseline level of purchase intent. Income also emerged as a significant predictor ($\beta = 0.14$, $p = .037$), indicating that higher income levels are associated with greater purchase intent. Gender was not a significant predictor.

Regression Analysis with Interaction Term

A regression analysis with interaction term was conducted to investigate the combination of two independent variables, frequency of reading reviews and interest created by reviews, and if these two variables jointly influenced the dependent variable (see Table 6). Including an interaction term could uncover nuanced relationships that may not be apparent between variables and provide insight into whether this combination significantly impacted purchase intent.

Table 6. Regression Analysis Predicting Purchase Decisions with Interaction Term and Perceived Trust

Predictor	B	SE	β	t	p
(Constant)	0.94	1.10		0.85	.41
Read Reviews Frequency	0.15	0.28	0.17	0.54	.60
Reviews Create Interest	0.40	0.24	0.46	1.67	.13
Perceived Trust	0.35	0.15	0.38	2.33	.04
Interaction Term	0.18	0.06	0.55	3.00	.01

The regression analysis revealed that perceived trust in online reviews significantly predicts purchase decisions ($B = 0.35, p = .04$). The interaction term between the frequency of reading reviews and the interest created by reviews also significantly predicts purchase decisions ($B = 0.18, p = .01$), indicating that the combined effect of these variables is significant. The model accounts for 63% of the variance in purchase decisions ($R^2 = 0.63$), and this relationship is statistically significant ($F(4, 6) = 5.12, p = .03$).

ANOVA for Interaction Effect

To validate the interaction effect, we conducted an ANOVA to hypothesize that the frequency with which consumers read reviews could influence the degree of interest those reviews generate, thereby impacting their purchase decisions.

Table 7. ANOVA for Purchase Decisions

Source	SS	df	MS	F	p
Read_Reviews_Frequency	1.15	1	1.15	2.88	.12
Reviews_Create_Interest	2.20	1	2.20	5.50	.04
Perceived_Trust	1.05	1	1.05	2.63	.14
Read_Reviews_Frequency * Reviews_Create_Interest	3.30	1	3.30	8.25	.02
Residual	5.10	10	0.51		
Total	12.80	14			

The ANOVA results indicate a significant interaction effect between the frequency of reading reviews and the interest created by reviews on purchase decisions ($F(1, 10) = 8.25, p = .02$). This supports the regression analysis findings and validates the importance of considering the combined effects of these variables.

Findings

H1: The frequency of reading online reviews significantly predicts purchase decisions. This was not supported. This result is similar to the findings of Hong et al. (2017), Lin et al. (2019), Quan et al. (2023), Xie et al. (2019), Zhu et al. (2016). This suggests that reading reviews frequently does not necessarily translate into a higher likelihood of purchasing. Consumers may read reviews out of habit, curiosity, or comedic entertainment without these reviews significantly influencing their purchase decisions.

H2: The interest created by online reviews significantly predicts purchase decisions. This was not supported. However, although our study did not find support for this standalone variable, existing literature from Filieri et al. (2015) supports the role of interest in online reviews and purchasing decisions. This finding implies that while reviews may initiate consumer interest, this interest alone does not necessarily lead to a purchase.

H3: Perceived trust in online reviews significantly predicts purchase decisions. This was supported. This result highlights the critical role of trust in the effectiveness of online reviews. When consumers perceive reviews as trustworthy, they are more likely to make purchase decisions based on these reviews. This finding is consistent with the research of Li et al. (2023), Tian (2023), and Wu & Hang (2023). This finding underscores the importance of marketers and e-commerce platforms in positively adopting and maintaining reviews' credibility to influence consumer behavior.

H4: There was a significant interaction effect between the frequency of reading reviews and the interest created by reviews on purchase decisions. This was supported. This new finding suggests that the combined effect of frequently reading reviews and the interest they generate, supported by Filieri et al. (2015), can significantly influence purchase decisions. It indicates that while neither factor alone may be sufficient, their interaction plays a crucial role in shaping consumer behavior.

Table 8. Results

Hypothesis	Supported	Not Supported
H1: The frequency of reading online reviews significantly predicts purchase decisions.		x
H2: The interest created by online reviews significantly predicts purchase decisions.		x
H3: Perceived trust in online reviews significantly predicts purchase decisions.	x	
H4: There was a significant interaction effect between the frequency of reading reviews and the interest created by reviews on purchase decisions.	x	

Discussion and Conclusion

This study provides valuable insights into the factors that influence consumer purchase decisions in the context of online reviews. Our findings indicate that perceived trust in online reviews is a significant predictor of purchase decisions, emphasizing the importance of credibility in review content. Additionally, the interaction between the frequency of reading reviews and the interest they generate significantly impacts purchase decisions, highlighting the need for engaging and trustworthy reviews to drive purchase intent.

For marketers and e-commerce platforms, these results suggest several practical implications. Ensuring the authenticity, quality, and reliability of reviews can enhance consumer trust and positively influence purchase decisions. Moreover, strategies that increase consumer engagement with reviews, such as highlighting particularly helpful or detailed reviews, can further boost their impact.

Future research can expand upon these findings by examining additional factors that may affect the effectiveness of online reviews, such as the review source or the type of product being reviewed. Additionally, longitudinal studies could offer deeper insights into how the influence of reviews on consumer behavior changes over time. Moreover, while previous literature, such as the work by Filieri et al. (2015), highlights the importance of interest in online reviews on purchasing decisions, our study did not support this finding. Therefore, further investigation is necessary to explore this discrepancy.

In summary, this study underscores the critical role of trust and engagement in the influence of online reviews on consumer purchase decisions. By understanding and leveraging these factors, marketers can better navigate the complexities of the online buying environment and enhance their marketing strategies to drive consumer engagement and sales.

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Sustainability and Technology Aspects of Supplier Performance

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Abstract

Due to the various methods of inventory management and the constant change of automation improvements the ability to improve these processes will help with production on a whole different level. These developments will help create a bright future within the transportation and warehousing industry within a sustainability framework dynamically moving towards the logistics and the trucking industries. Local companies in the Pittsburgh region (e.g., Pitt-Ohio, Wabtec, and Pittsburgh Brewing Company) are currently solving these problems to help create a better environment and product efficiency for the consumer in the face of global warming and geopolitical conflicts. This paper will conclude an analysis of the following companies about inventory management, LTL- and TL-trucking, and supply chain and logistics management and a relatively detailed empirical analysis on the perceptual benefits and costs associated with these factors of supplier-related sustainability, performance, selection, and technology.

Keywords: Automation, Business Case Study; Digital Supply Networks; Empirical; IOTS; Logistics Management; Supply Chain; Sustainable Supply Chain Management (SSCM); Trucking.

INTRODUCTION

Sustainability and the Need to Act Responsible

As many fans watched the 2024 edition of the NFL Super Bowl with the largest televised event in history (over 100M viewers), renewed interest in the carbon footprint was focused on the extremely wealthy. As Taylor Swift flew over 19,000 miles to attend the Super Bowl event from Tokyo, Japan in a private jet, the pollution was estimated to be more than 14 times as compared per passenger to that of a commercial airline, 50 times more on a passenger train, and about 14 times that of an average annual U.S. household (200,000 pounds of CO₂) (Williams, 2024). Over 882 corporate-style private jets landed in Las Vegas, NV to attend the professional football event (Rivero, 2024). The Stockholm Environment Institute in 2019 estimated that the wealthiest 10% were responsible for 50% of global emissions, while only 8% was contributable to the bottom 50%. In fact, a recent report found that the carbon emissions of the richest 1% (e.g., defined as having an annual income of at least US\$140,000 or a mean income of US\$310,000, representing 77M people) were essentially the same as those of the poorest 66%. Within this 1%, about 33% were from the U.S. alone, followed by China and the Arab Gulf States) (Reid, 2023). The academic literature is extremely rich in the need for sustainability within the global supply chain (Blome, et al., 2014; Busse, et al., 2016; Chen, et al., 2017; Chen & Chen. 2019).

Purpose of Study

A relatively steep acceleration of consumer behavior shifting in present time, coupled with population growth and increased demand puts a strain on supply chain systems. Globalization and the outsourcing of labor and materials present opportunities for lower costs and higher efficiency to help meet demand, but that may come with ethical tradeoffs. With so many factors to consider when managing a supply chain, this research paper aims to examine the approach that works best to integrate sustainability into a supply chain. Specifically, there are two major portions of this present research effort; namely, a best-business practice case (*Creswell, 2003*) and an empirical study from a business professional perception of supply chain performance as it conceptually and financially intersects with sustainability issues. There are four research propositions that will be explored:

What considerations should be taken when transporting goods to end-users via technology-based and sustainably from a business management perspective? This research proposition will be mainly addressed by the case study portion of the present research effort.

What are some of the industry specific factors in which the organization operates that contribute to the approach they should take for sustainable transportation within their supply chain? This item will be more addressed in the empirical section.

What kinds and types of local current and future supply chain efficiencies, sustainability and technologies programs are gaining traction that organizations can leverage? This research proposition will be addressed by both the case study and empirical portion of the present research effort.

From a personal business professional perspective, what are some of the major supplier performance and substantiality concerns that are associated with technological innovations and strategic TQM and sustainability initiatives within their companies? Do supply performance perceptions run parallel or counter to these various strategic initiatives? These issues will be entirely addressed by the empirical portion of the present study.

It is a basic premise that those organizations that fail to actively develop and implement strategies to reduce emissions, limit waste, or attain other sustainability goals, may risk alienating both their supply chain partners as well as end users (*McDonagh & Clark, 1995; Menon, et al., 1999; Moisaner, 2007; Smith, 2022*). The resulting mix of inquiry methods would result in reduced corporate reputation as the effects of climate change become even more apparent to professionals and customers alike. Corporate responsibility has significant benefits in constructing a sustainable supply chain (*Andersen Skjoett-Larsen, 2009*).

CASE STUDIES

The trucking industry holds immense value when it comes to transportation and delivering goods across the country and internationally. The entire world has been built off of supply chains and the constant processes that are implemented. Table 1 are some of SCM-related efficiencies, sustainability initiatives, and technologies for Pitt-Ohio for a current day structure versus the plans and goals that are trying to achieve long-term.

Table 1. Comparison of current and future supply chain efficiencies, sustainability and technologies for PITTOHIO.

<i>Supply Chain Characteristics</i>	<i>Pitt-Ohio Current State</i>	<i>Pitt-Ohio Future Directions</i>
Efficiency	The current processes put in place for efficiency consist of rerouting line hauls and close distribution centers to help with reduced costs and faster delivery times	Many of the processes are continuing for the future and long-term success of the company. As time goes on, Pitt-Ohio plans on reducing waste can have a negative effect on productivity until processes are stabilized.
Sustainability	Pitt-Ohio has made many changes to its current sustainability program by allowing for more financial resources to be allocated to reducing emission and having a more positive impact on both consumers and their surrounding communities.	Sustainability has always been a major focus at Pitt-Ohio and a work-in-progress with management. The plan appears to continue to create less environmental harm with emissions and, potentially, switch to using electric vehicles to further reduce carbon emissions
Technology	Currently, Pitt-Ohio is working on optimizing their web-based systems to make routing and their clients organized as they are still a rapidly growing company. Management is currently supporting a B2B XML interface.	In the near future, management at Pitt-Ohio plans on blitzing significantly more automation and related user interfaces to help keep their customers and clients more real-time informed.

Wabtec is a multinational company that is a leading global provider of Locomotives, Mining Equipment, digital solution systems and value-added services. Dealing in both the freight and transit rail industries, twenty percent of the world's freight is moved by Wabtec locomotives, and twenty percent of rail cars have their equipment in them, and these locomotives travel over 1.5 billion miles per year. There is a lot of movement in the supply chain that makes all of this happen. Wabtec has facilities all over the world, headquartered in Pittsburgh, PA, they have Domestic production facilities in Fort Worth, TX, Erie, PA, and an engine facility in Grove City. They also have dozens of International production facilities, as well as Information Technology hubs, signaling hubs and warehouses. The company's origins can be traced back to 1869 with the creation of the Westinghouse Air Brake Company, WA & B and also WABCO, but became independent in 1990 and went public after a management buyout in 1995. This paper will be detailing the intricacies of the businesses supply chain and how it has transformed into the global transportation powerhouse it has become.

Pittsburgh Brewing Company (PBC)

The Pittsburgh Brewing Company (PBC) is one of the largest breweries on the eastern coast of the U.S. They are most known for their Iron City and IC Light brands that are a Pittsburgh staple when it comes to the beer market in Pittsburgh and its surrounding areas. They have been around for a long time (1861), However, in 2005 did end up filing for Chapter 11 Bankruptcy, but eventually was re-opened in 2007. Although they are widely known within the people of Pittsburgh, in the grand scheme, they are still a small company. Overall, they only currently have

distribution chains to 12 states, but 90% of their revenue does come from four states (PA, OH, WV, MD) (PBCo, 2023). However, they do have opportunities to expand their control of the market. They recently opened a new 170,000 square foot production facility in Lawrenceville, PA in 2022 (Breweries in PA, 2022). This facility increased their production from 100,000 barrels to 200,000 with the potential capacity to produce 500,000 (Locklin, 2022). Overall, this company can expand its reach thanks to its new increased potential capacity. Therefore, this paper will discuss some potential aspects to consider, and present some opportunities that PBC could pursue to grow its market via strategic supply chain decisions. Table 2 illustrates some of the current issues associated with the brewery's current versus what their future supply chain efficiencies, sustainability and technology is currently levied.

Table 2. Comparison of current and future supply chain efficiencies, sustainability and technologies for Pittsburgh Brewer Company (PBC).

Supply Chain Characteristics	PBC Current State	PBC Future Directions
Efficiency	Their current supply chain process would be deemed efficient. They can maintain all their production and storage within the same location for ease. This allows for them to produce and ship their productions under one campus and limits the risk of damaged product for transport between brewery to warehouse storage.	As they continue to utilize their newly open production/storage campus in Lawrenceville, they will continue to make their production more efficient. To decrease the risk of having damaged goods (quality decrease from transportation) to farther away market, they will have opened an additional warehouse. This warehouse will act as a middle point between their production in Pittsburgh and help decrease the risk of damaged goods. This is because there will be a decrease of travel time between production to customer by additional a space for product to remain safe and away from the risk that lie within truck transporting of refrigerated goods.
Sustainability	Like above, PBC has made efforts to being more sustainable. First, they were able to open their new production facility with the latest GEA technology that provides the best efficiency with less product waste. They are also able to limit additional travel between their production with their warehouse. The warehouse is also currently centralized in terms of location to their current market reach with their products.	Since PBC will pursue an additional warehouse location, they will ensure they invest in building a new one or partnering with a third-party that will provide them with energy efficient options for refrigeration. To stay sustainable, PBC will need to ensure they operate with more efficient storage for both quality of product and positive environmental effects. Additoanly, since there will be an increase in trucking as their markets extend, they will need to consider investing in more electrified truck fleets, or working with a company like PITTOHIO that would provide them with environmentally friendly freight options. This will allow them to maintain sustainability efforts while expanding their markets.
Technology	When considering technology within PBC's supply chain, as mentioned above, they are utilizing the state-of-the-art brewery equipment that allows them to produce their products more efficiently, with less waste and for cheaper operations costs. Outside of this, there is not much new technology implementation for technology that PBC is currently doing.	Whereas in the future PBC will continue to invest in new brewery equipment to improve efficiency and sustainability within their supply chain as whole. Additionally, they will need to invest in better inventory software. This is because they will be utilizing two warehouse locations instead of one. Therefore, it is important to ensure that the two are connected under the same technology to improve efficiency and maintain a steady supply chain flow.

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Track: Geomarketing
ID#: 1746

Geomarketing: Revolutionizing Market Strategies and Enhancing Spatial Decision-Making through AI-Driven Insights

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Abstract

The advent of generative AI technologies, particularly platforms like ChatGPT, has revolutionized various sectors, including geomarketing. This study delves into using generative AI to augment geospatial analysis, aiming to improve market segmentation, location-based advertising, and customer engagement strategies. By leveraging the sophisticated capabilities of ChatGPT, we aim to transform traditional geomarketing practices, enhancing the precision and predictive power of spatial data analysis.

Geomarketing involves integrating geographical data with marketing strategies to optimize business decisions based on location-specific consumer behavior. Traditional geomarketing methodologies often struggle with processing and interpreting large, complex datasets. Generative AI, however, offers a dynamic solution by automating data analysis and generating actionable insights in real-time. This research explores how ChatGPT can streamline geospatial data processing, identify hidden patterns, and provide predictive analytics to inform marketing strategies.

Methodology:

Our study employs quantitative and qualitative methods to assess the impact of generative AI on geomarketing. The quantitative analysis involves applying ChatGPT to a comprehensive geospatial data set, utilizing ESRI's ArcGIS Online and ESRI Business Analyst to measure the accuracy, speed, and predictive capabilities of AI-driven insights compared to traditional methods. The qualitative component includes interviews with marketing professionals who have integrated ChatGPT into their geomarketing workflows, providing practical insights into the benefits and challenges of AI adoption.

We will utilize various online data sources to collect and prepare the necessary data for our analysis. OpenStreetMap (OSM) will provide detailed geographical data for Atlanta, Georgia; Birmingham, Alabama; and Knoxville, Tennessee, offering comprehensive coverage of these regions. The U.S. Census Bureau's datasets will offer demographic, economic, and housing data essential for market segmentation and consumer behavior analysis. Google Trends will gain insights into search trends that can be geographically segmented to understand regional interests and behaviors. At the same time, the Twitter API will enable the extraction of geotagged tweets to analyze consumer sentiment and trends in specific locations.

We will use R, a statistical computing language, along with various libraries and APIs to collect and process this data. The tidycensus package will fetch demographic data from the U.S. Census

Bureau, while the `httr` and `jsonlite` packages will facilitate data retrieval from APIs like Yelp Fusion and OpenStreetMap. We will use the `osmdata` package to fetch relevant information from OpenStreetMap for traffic and mobility data. Additionally, public APIs will provide socioeconomic data, such as crime statistics, which will be fetched and processed using R.

The collected data will be cleaned and normalized using R's powerful data manipulation capabilities provided by libraries such as `dplyr` and `tidyr`. This ensures consistency and accuracy in the dataset, enabling robust analysis. Geospatial data processing will involve operations such as spatial joins, buffering, and overlay analysis facilitated by R's `sf` and `Geopandas` libraries.

ArcGIS Online will visualize and analyze the spatial data, creating interactive maps highlighting key findings. ESRI Business Analyst will aid in demographic analysis and market segmentation, providing deeper insights into consumer behavior and trends. By integrating ChatGPT into this workflow, we aim to streamline the data processing and analysis steps, making the process more efficient and insightful. The automation capabilities of ChatGPT will assist in coding, data cleaning, and generating insights based on the analysis, thus enhancing the overall efficiency and effectiveness of the research.

This methodology allows us to systematically explore the potential of generative AI in geomarketing, combining robust data collection and processing techniques with advanced analytical tools to derive meaningful insights that can inform marketing strategies. Integrating qualitative insights from industry professionals further enriches the study, offering a comprehensive view of AI's practical applications and implications in geomarketing.

Preliminary Results:

Preliminary results indicate that generative AI significantly enhances the efficiency and effectiveness of geomarketing. ChatGPT's ability to process vast amounts of data rapidly allows for the timely identification of emerging trends and consumer behavior patterns. Our data analysis shows that ChatGPT can handle complex geospatial datasets, integrating various sources such as demographic information, business locations, consumer behaviors, and traffic patterns. This rapid processing capability leads to quicker and more accurate identification of market trends, which is critical in dynamic and competitive markets.

The AI's predictive analytics capabilities stand out as a significant advancement. By leveraging machine learning algorithms, ChatGPT can identify hidden patterns within the data, providing insights that might not be immediately apparent through traditional analysis methods. These insights allow for more precise market segmentation, where consumers are grouped based on specific behaviors, preferences, and demographic factors. This precision in market segmentation enables businesses to tailor their marketing strategies more effectively, targeting particular groups with customized messages and offers. As a result, businesses experience higher engagement rates, with marketing campaigns resonating more deeply with the intended audience.

Moreover, targeted advertising, informed by ChatGPT's predictive analytics, shows a notable improvement in conversion rates. By understanding consumer behavior patterns and preferences, businesses can create highly relevant advertisements that address their target audience's specific needs and desires. This relevance captures the attention of potential customers and increases the

likelihood of converting them into actual buyers. The efficiency of these targeted campaigns reduces marketing costs and maximizes return on investment, making marketing efforts more sustainable and profitable.

The study also highlights the democratizing effect of generative AI in geomarketing. Advanced geospatial analytics, traditionally the domain of large corporations with significant resources, are now accessible to businesses of all sizes. ChatGPT's user-friendly interface and powerful analytical capabilities lower the barrier to entry, enabling small and medium-sized enterprises to compete on a more level playing field. This accessibility means businesses with limited technical expertise can leverage sophisticated geospatial insights to inform their marketing strategies, fostering innovation and competitiveness across various sectors.

Furthermore, the integration of ChatGPT into geomarketing workflows streamlines data processing tasks that were previously time-consuming and labor-intensive. By automating data cleaning, normalization, and initial analysis, ChatGPT frees up valuable time for marketing professionals, allowing them to focus on strategic decision-making and creative aspects of their campaigns. This increased efficiency enhances productivity and ensures that marketing strategies are based on the most up-to-date and accurate data available.

In summary, our preliminary results underscore the transformative potential of generative AI in geomarketing. ChatGPT enhances efficiency through rapid data processing, improves effectiveness with precise market segmentation and targeted advertising, and democratizes access to advanced geospatial analytics. These advancements lead to better customer engagement, higher conversion rates, and a more competitive marketing landscape where businesses of all sizes can thrive. As we refine our analysis, we anticipate uncovering even more ways in which generative AI can revolutionize geomarketing practices, ultimately driving greater innovation and success in the field.

Challenges and Ethical Considerations:

However, the integration of generative AI in geomarketing has challenges. Concerns regarding data privacy, algorithmic bias, and the need for specialized expertise to interpret AI-generated insights are critical issues that must be addressed. This research proposes a framework for the ethical use of AI in geomarketing, emphasizing transparency, accountability, and ongoing evaluation of AI performance to mitigate potential risks.

Conclusion:

This study underscores the transformative potential of generative AI in geomarketing. By enhancing the accuracy and efficiency of geospatial analysis, AI technologies like ChatGPT offer valuable tools for marketers seeking to optimize their strategies in an increasingly competitive landscape. Future research should focus on refining AI algorithms, expanding the applications of generative AI in geomarketing, and developing comprehensive guidelines for ethical AI use.

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Track: Geomarketing

ID#: 1792

HEALTH CARE MARKETING

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Online Sexual and Reproductive Health Information: Consumer Dissemination on Social Media and Networks

BEST ABSTRACT IN TRACK

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Abstract

Despite the importance of sexual and reproductive health (S&RH) information in family planning and prevention of undesired outcomes, related education in the United States' education system is varied, incomplete, or altogether absent (Hall, Sales, Komro, & Santelli, 2016). As is the case with all preventive health care information (PHCI), S&RH PHCI has the capacity to provide social and economic benefits (Tacco, Sanchez, Connolly, & Compeau, 2018) in the U.S., a country where approximately 35.7% of pregnancies are unintended (Tsai, 2023) and sexually transmitted infections (STIs) account for billions in healthcare system costs annually (Centers for Disease Control, 2021). However, to effectively reach these consumers and leverage the power of social networks, health organizations and experts need a clear understanding of which consumers share S&RH information on SM&N.

Research Question

What are the attributes of consumers who report regularly sharing S&RH PHCI on SM&N?

Methods

A 2022 questionnaire via the Luth Research paid online panel enabled researchers to gather the necessary information, including 12 demographic characteristics (health insurance coverage, access to health and wellness programs at work, age, gender, ethnicity, marital status, educational attainment, occupational status, income level, employment in healthcare, political affiliation, religious affiliation) and consumer responses to one questionnaire item. Research parameters dictated Luth Research would provide 800 usable responses aligned to US demographic norms related to generational cohort membership and ethnicity. Through random selection of respondents, the researchers achieved demographic balance.

Measures

Demographic characteristics

Responses were analyzed according to health insurance coverage, access to health and wellness programs at work, age, gender, ethnicity, marital status, educational attainment, occupational status, income level, employment in healthcare, political affiliation, religious affiliation.

Sharing Behavior: S&RH PHCI

To learn which respondents regularly engaged in S&RH PHCI information sharing, the

researchers assessed agreement with the following questionnaire item:

How “likely” would you be to share information about sexual and reproductive health on social media sites?

The six-point response scale included these options: Definitely; Very Likely; Somewhat Likely; Somewhat Unlikely; Very Unlikely; Definitely Not.

Findings

Health Insurance Status: Consumers without health insurance were most likely to share S&RH on SM&N ($p = 0.012$).

Employer-Provided Health and Wellness Programs: Those whose employers offered health and wellness programs were more likely to share S&RH-PHCI ($p = 0.000$).

Age: Consumers ages 25-34 were most likely to share S&RH PHCI, followed by consumers ages 18-24 ($p = 0.000$). Older age groups were less likely to share S&RH-PHCI.

Gender: Neither gender was more likely to share S&RH-PHCI.

Ethnicity: Caucasian consumers were least likely to share S&RH-PHCI, while “Other” (Native American, Asian), African American, and Hispanic consumers were more likely ($p = 0.000$).

Marital Status: There were significant differences between marital categories (Single/Never Married, Married, Partnership or cohabitation, Separated, Divorced, Widowed), with “single/never married” respondents being most likely to share S&RH PHCI ($p = 0.000$).

Educational Attainment: Consumers with an education level of “high school or less” were most likely to share S&RH PHCI ($p = 0.000$).

Occupational Status: Consumers employed part-time and full-time were most likely to share S&RH PHCI ($p = 0.000$).

Income Level: Those consumers indicating the lowest level of income (\$0-14,999) were most likely to share S&RH PHCI ($p = 0.043$).

Employment in Healthcare: Those employed in healthcare were more likely to share S&RH PHCI ($p = 0.000$).

Political Affiliation: There was no significant difference in likelihood of S&RH PHCI sharing across political identities.

Religious Affiliation: There was no significant difference in likelihood of S&RH PHCI sharing by religious affiliation.

Discussion

The value of social media and networks is rooted in access to networks in which each actor – whether a person or entity – is a “node” connected to many other nodes via any number of associations (family, social, professional, community, interest, politics, etc.) For health care marketers aiming to maximize reach, it is crucial to understand which consumers are most likely to not just consume but also *share* preventive health care information with their networks. Targeting these users can and should amplify campaign results.

Findings herein indicate the consumers most likely to *share* S&RH PHCI are generally those who, according to public health research, have the greatest *need*. Following are three examples:

Age Our findings indicate consumers ages 18-34 are more likely to share S&RH PHCI than their older peers. These findings align with peak fertility years for women (The American College of Obstetricians and Gynecologists, 2024) and peak sexual activity years for both genders (Kinsey Institute, n.d.). Additionally, consumers aged 18-24 are the most affected age group when it comes to STIs (Centers for Disease Control, 2022). However, it is important to note S&RH information remains important for older consumers, as rates of STI infection for chlamydia, gonorrhea, and syphilis more than doubled from 2012-2022 among consumers ages 55 and older (Bendix, 2024).

Ethnicity This research indicates Caucasian consumers are least likely to share S&RH PHCI, while “Other” (Native American, Asian), African American, and Hispanic consumers are more likely. STIs affect racial and ethnic minorities at a disproportionate rate in the US (Medical Institute for Sexual Health, n.d.). In 2019, STI rates were 5-8 times higher for Black consumers than White consumers; 3-5 times higher for Native American Indian/Alaska Native/Native Hawaiian/Other Pacific Islander consumers; and 1-2 times higher for Hispanic consumers (Medical Institute for Sexual Health, n.d.). The higher infection rate is related to social conditions (e.g. poverty, distrust of the healthcare system associated with discrimination, low education levels) more likely to affect minority groups (STD Health Equity, n.d.).

Marital Status Single/never married consumers were the most likely to share S&RH-PHCI. Given almost all adults have sex before marrying (Finer, 2007) and the majority of adults find sex between unmarried adults acceptable (Barroso, 2020), it stands to reason single/never married consumers would have a vested interest in S&RH-PHCI.

Conclusions

Healthcare marketers can maximize reach on social media and networks through effective targeting of those consumers who are most likely to share S&RH PHCI. More research is needed to gain a degree of understanding capable of underpinning an overall promotional campaign. In particular, the researchers will next assess platform preferences and preferred source selection attributes among those likely to share S&RH PHCI. When complete, this study has the potential to guide full S&RH PHCI promotional planning for healthcare entities and organizations.

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Keywords: Preventive Health Care Information, Social Media, Social Networks, Marketing, Consumer Behavior, Sexual Health, Reproductive Health

Relevance: Given the established role of social media and networks (SM&N) in the dissemination and acquisition of PHCI, the socioeconomic benefits of preventive health care, and the prevalence of unintended pregnancies and unwanted sexually transmitted infections in the United States, healthcare marketers require insights designed to inform effective use of social media and networks for educational purposes.

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Track: Healthcare Marketing
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Unlocking the Potential of Social Media and Networks: Meditation Practices

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Abstract

Meant to initiate life-enhancing and/or disease-limiting behaviors (Cangelosi and Markham, 1994; Jayanti & Burns, 1998; Cangelosi, Ranelli, & Kim, 2012), preventive health care information (PHCI) has the potential to create socioeconomic value (Tacco, Sanchez, Connolly, & Campeau, 2018). This is particularly important in the United States, where consumers have the poorest overall health outcomes of any high-income nation (Tikkanen & Abrams, 2020). For example, the United States has the highest death rate for preventable/treatable conditions and among the highest suicide rates despite spending approximately 18 percent of GDP on health care (Gunja, Gumas, & Williams, 2023).

When thinking of preventive health initiatives, traditional programs such as those promoting smoking cessation, cancer screenings, and weight loss usually come to mind. However, expanding research indicates the value of Complementary Alternative Medicine (CAM) such as mind-body therapies used alongside traditional medicine (National Center for Complementary and Integrative Health, 2021). Meditation (including yoga) promotes bodily attunement, serenity of the mind, and spiritual cleansing that appear to provide mental and physical health benefits (Saud, Abbasi, Merris, Parth, Jones, Aggarwal, & Gupta, 2022). Aiding consumers faced with the stressors of modern living (Davidson & Kaszniak, 2015), meditation may offer physical health benefits such as lower blood pressure, lower heart rate, and improved sleep (Mayo Clinic, 2022). Despite increasing evidenced concerning the benefits of meditation practice, only 14.2% of U.S. adults (mostly women) engage in the activity (Clarke et al., 2018). For healthcare marketing professionals working to promote meditation practice, it is important to note consumers – especially younger and minority ethnicity consumers – increasingly rely on social media and networks (SM&N) for acquiring and disseminating PHCI (Cangelosi, Damron, & Kim, 2022; Cangelosi, Damron, & Ranelli, 2021; Cangelosi, Kim, Griffin, & Ranelli, 2019).

Recognizing the power of social networks for transmitting information, this study is designed to uncover the attributes of consumers who believe SM&N are important for *learning about* meditation and the attributes of consumers who report *sharing* meditation PHCI on SM&N.

Research Questions

Two research questions were addressed:

RQ1: What are the attributes of consumers who report SM&N is important for acquiring meditation PHCI?

RQ2: What are the attributes of consumers who report sharing meditation PHCI on SM&N?

Methods

This research utilizes consumer responses to a 2022 questionnaire issued via Luth Research, a paid/online panel of more than two million potential respondents. The study sample (n = 800) conforms to national demographic norms for generational cohorts and ethnicity.

Measures

Demographic characteristics

Questionnaire responses were analyzed according to generational cohort group, age class, gender, ethnicity, educational attainment, household income, occupational status, marital status, and health insurance coverage status.

Meditation PHCI acquisition behavior

Researchers studied those who issued a positive response to the following questionnaire item: How important is social media for learning about EACH of the following activities or products, which could improve your health?

For “meditation”, respondents used a six-point importance scale: Very Important, Important, Slightly Important, Slightly Unimportant, Unimportant, Very Unimportant

Meditation PHCI dissemination behavior

Researchers studied those who issued a positive response to the following questionnaire item:
How likely would you be to share each of the following types of information on a social media platform:

For “information about meditation”, consumers responded using this six-point scale: *Definitely, Very Likely, Likely, Unlikely, Very Unlikely, Definitely Not.*

Findings

Meditation PHCI acquisition behavior

Using ANOVA, researchers learned consumers with the following attributes are more likely to consider social media important for *learning about* meditation:

- GenZ and Millennial
- Younger; ages 18-44
- Female
- African American, Asian, Hispanic, or Native American
- Single, Never Married
- Consumers employed in healthcare
- Persons who consider themselves in very good health
- Consumers who are meditation practitioners
- Consumers who practice meditation with greater frequency

There was no significant relationship between level of educational attainment and likelihood of viewing social media as important for learning about meditation. Similarly, household income had no relationship to perceived importance of social media for learning about meditation.

Meditation PHCI dissemination behavior

Through ANOVA, researchers learned consumers with these attributes are more likely to *share* meditation PHCI on SM&N:

- Gen Z and Millennial
- Somewhat younger; ages 25-34
- African American or Native American
- Single, Never Married or cohabitating
- Less educated
- Lower income
- Consumers employed in healthcare
- Persons who consider themselves in very good health
- Consumers who are meditation practitioners
- Consumers who practice meditation with greater frequency

There was no significant relationship between gender and likelihood of sharing meditation PHCI on SM&N.

Discussion

There is considerable alignment between the attributes of those who consider SM&N important for gathering meditation PHCI and those who are likely to share meditation PHCI. This is an exciting realization for healthcare marketers who know the full utility of SM&N is derived from consumption *and* sharing, not merely consumption. For example, a practitioner targeting Gen Z and Millennial consumers could anticipate not only a strong user response (reactions, comments) to content but also considerable content sharing. Still, practitioners will need to carefully consider other elements of promotional strategy (message development, source selection, etc.) to maximize campaign effectiveness.

Limitations and Future Research

While the information provided herein allows healthcare marketers to engage in more effective targeting for meditation PHCI campaigns, there is a need to understand which networks consumers use for both acquiring and sharing meditation PHCI. As this study progresses, researchers will evaluate related questionnaire responses to provide network-specific recommendations.

Future research projects should examine the degree to which consumer attributes covary, enabling marketers to develop robust personas used in the segmentation process when utilizing social media and networks. Additionally, researchers should examine the varied engagement methods consumers utilize to understand how consumers prefer to undertake meditation (e.g. via smartphone app, in class with others, alone, etc.). Finally, the research questionnaire assumes the respondent understands the varied types of meditation (yoga, Tai Chi, Qigong, general mindfulness meditation, etc.) and should include a brief explanation to insure accuracy in consumer responses.

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Keywords: Preventive Health Care Information, Social Media, Social Networks, Consumer Behavior, Yoga, Meditation, Mind-Body Therapy, Complementary Alternative Medicine

Relevance: Social media and networks (SM&N) have an established role in the dissemination and acquisition of PHCI. Given the state of American health/healthcare and the potential socioeconomic benefits of preventive health activities like meditation, there is a need for health organizations and retailers to effectively leverage the power of social media and networks to educate and engage consumers in complementary alternative medicine practices. With insights gained through this work, marketers can design better targeted strategic marketing communication plans.

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Caring for Caregivers: A Health Care Marketing Opportunity

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INTRODUCTION

This paper describes family caregivers, their experiences and the impact of caregiving on their health. Multiple sources document the adverse health impact of caregiving on caregiver health and typically recommend self-care as an important strategy for caregivers to make use of to maintain their own health. However, given the current state of caregiver health, the development of service and product offerings that better align with and support self-care for caregivers represents an opportunity. It is imperative that the adverse impact of caregiving on caregiver health be addressed. They play a critical role in society. Additionally, as the population continues to age, the need for caregivers will also increase (“Supporting caregivers”, 2021).

Caregiver Definition

The Center for Disease Control defines family caregivers as:

family members or friends who typically provide unpaid, long-term, community-based care and assistance for older adults and people with chronic health conditions or disabilities. Caregivers help with a variety of routine tasks such as shopping, paying bills, bathing, dressing, and managing medicines. They are often a source of emotional support and companionship for care recipients. (“Supporting caregivers”, 2021)

The majority (58%) of family caregivers are female, 33% of them provide care for a minimum of 20 hours per week, 79% of them are over the age of 50, 76% are over the age of 65, and they typically lack formal training related to caregiving (“Supporting caregivers”, 2021).

Caregiver Experience

The caregiver experience can be beneficial. Some of the reported benefits include caregivers feeling good about themselves, feeling that caregiving adds meaning to their life, feeling that caregiving allows them to strengthen relationships and allows them to learn new skills. At the same time, caregiving also represents a chronic stress experience (Schulz & Sherwood, 2008).

“It [caregiving] creates physical and psychological strain over extended periods of time, is accompanied by high levels of unpredictability and uncontrollability, has the capacity to create secondary stress in multiple life domains such as work and family relationships, and frequently requires high levels of vigilance” (Schulz & Sherwood, 2008).

In 2023 AARP, (as cited by Verano, 2024) reported over 38 million American caregivers, many of whom moved into their roles quickly, due to a change in health status of the individual they are caring for (e.g. a heart attack or a stroke). “Many people enter this realm shell-shocked – stunned into emotional turmoil by witnessing a critical moment in the life of a loved one.”

(Verano, 2024)

Impact of Caregiving on Caregiver Health and Mortality

According to BlueCross BlueShield (BCBS), physical and behavioral health conditions have a greater adverse impact on caregiver health. Specifically, physical and behavioral health conditions that could adversely impact health have a 26% greater impact on the overall health of caregivers versus the benchmark. (“Impact of caregiving”, 2020). Furthering this point, table 1 provides the prevalence rate for six conditions (adjustment disorder, anxiety, major depression, tobacco use disorder, obesity and hypertension) for caregivers versus the benchmark.

Table 1: Condition Prevalence Among Caregiver vs. Benchmark, 2018 (per 100)

<i>Conditions</i>	<i>Caregivers</i>	<i>Benchmark</i>	<i>Difference (%)</i>
Adjustment Disorder	6.1	4.5	+36
Anxiety	18.0	13.5	+34
Major Depression	7.4	5.4	+37
Tobacco Use Disorder	9.9	7.0	+42
Obesity	26.9	17.9	+50
Hypertension	39.3	23.9	+64

Adopted from: BlueCross BlueShield (2020). Impact of caregiving on mental and physical health, the health of America report.

While the impact of caregiving on the health of caregivers is clearly relevant for the general population, there are differences with respect to racial and ethnic populations. The adverse health impact of caregiving for caregivers of color is more pronounced when compared to the impact on white caregivers (“Impact of caregiving”, 2020). This is supported by the BCBS Health index data presented in table 2. Table 2 provides the BCBS health index calculated by caregiver race.

Table 2: Health Index of Caregivers Versus Benchmark by Community, 2018

	<i>Caregivers</i>	<i>Benchmark</i>	<i>Difference (%)</i>
Black	85.9	91.5	-5.6
Hispanic	88.4	92.8	-4.4
White	89.6	91.7	-2.1

Adopted from: BlueCross BlueShield (2020). Impact of caregiving on mental and physical health, the health of America report.

It should be noted that due to COVID-19, 25% of all caregivers reported feeling more stressed in their role as caregiver as they managed their work and family responsibilities (“Impact of caregiving”, 2020). Additionally, 70% of caregivers were concerned that their care recipient would contract COVID-19 (“Caring for the carers”, 2023).

Two conditions found to impact the mental health of caregivers include: compassion fatigue, and post traumatic care giving. Compassion fatigue is an empathetic caregiver response along with the inability to detach from the caregiving situation and dissatisfaction with the caregiving situation. It is comprised of feelings of uncertainty, doubt, attachment and strain (Day, Anderson

& Davis, 2015). Many caregivers do not develop post-traumatic stress disorder (PTSD) however, many do experience post-traumatic caregiving (PTCG). While the symptoms of PTSD include: flashbacks, and following exposure to traumatic reminders, emotional distress and/or physical reactivity; PTCG incorporates the fact that a triggering event has taken place with a loved one that may subsequently include a cascade of critical moments (Verano, 2024). “The random nature of the next crisis—known as “what now?” moments—and the challenge of having to juggle multiple demands sets PTCG apart from other syndromes” (Verano, 2024).

An additional area of concern related to the impact of caregiving on the caregiver extends beyond physical and mental health concerns into mortality. It has been estimated that adult children acting as caregivers for a parent potentially shorten their own lives by 4 – 8 years, due to the impact of chronic stress (Bursack, 2014).

Caregiver Interventions

Research outlines criteria for effective caregiver interventions. These criteria stipulate that interventions should address both preventative care and self-care, should allow for active learning and application of skills being learned, and should be provided over an extended period of time (“Families caring for”, 2016). Additionally, while there has been progress made with research-based caregiver intervention strategies, there is an opportunity to enhance efforts related to promote, dissemination and adopt these existing offerings (“Families caring for”, 2016) as well as to develop and operationalize enhanced services and products for caregiver.

Marketing Implications

Professional advocacy groups, including nurses and social workers, have been instrumental in raising awareness of the health effects of caregiving (Schulz & Sherwood, 2008). The importance for caregivers to engage in self-care activities is consistently mentioned as a strategy to manage caregiver related stress and subsequently the risk for the development of or worsening of other health conditions. At the same time, there are challenges. Many caregivers are not able to obtain or participate in selfcare, due to caregiving priorities (Bursack, 2014). Consequently, healthcare marketers have the opportunity to collaboratively develop and distribute service and product offerings to align with the needs of caregivers. It is clear that additional research that captures “the voice of caregivers” and their journeys would be valuable to those that have an interest in promoting and supporting caregiver wellness.

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Maladaptive Influences of Direct-to-Consumer Pharmaceutical Advertising: The Moderating Influence of Age and Consumer Loneliness

BEST PAPER IN TRACK

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Abstract

Direct-to-Consumer Pharmaceutical Advertising (DTCA) is controversial and debated. The current research unearths a hitherto unexplored maladaptive effects of DTCA on consumers with real consequences on consumers' health outcomes. Coalescing a comprehensive literature review from psychology, marketing, and healthcare disciplines this research predicts that, due to the affect and availability heuristics, DTCA reduces health optimism especially for certain vulnerable groups of consumers, which affects their objective health downstream. Consistently, empirical evidence from two studies shows that, DTCA reduces health optimism for older consumers, lonelier consumers, and older-health anxious consumers.

Keywords: Direct-To-Consumer Pharmaceutical Advertising, Advertising, Health Optimism, Loneliness, Age, Health Anxiety

Relevance to Marketing Educators, Researchers and/or Practitioners:

Introduction

Advertising relies on optimism, either through termination of negative states or onset of positive states (Rossiter and Percy 1991). Indeed, most advertisers spend significantly to enhance consumers' **hope** (Macinnis and DeMello 2005, p9). Optimism is especially important in healthcare and is a key part of the lives of consumers with chronic illness (Delbaere and Willis, 2015). There is considerable evidence that health optimism affects objective health (Borawski, Kinney, and Kahana, 1996; Ruthig and Chipperfield, 2007; Hong, Oddone, Dudley, and Bosworth, 2005; Ruthig, Hanson, Pedersen, Weber, and Chipperfield, 2011) which makes it important to investigate. A decline in health optimism (hereafter referred to as HO) leads to apathy, unhealthy behaviors (Ruthig et al 2011), avoidance, and greater reliance on medication than prevention (Scheier et al 1986). **Health** optimists exercise more (Hong et al 2005) and enjoy greater survival (Borawski, Kinney, and Kahana, 1996); they have better functional and psychological **health** while **health** pessimists suffer more frequent and longer hospitalizations (Ruthig and Chipperfield, 2007).

Is it possible that advertising, most specifically, direct to consumer pharmaceutical advertising (DTCA), while in the pursuit of enhancing optimism, could inadvertently reduce it? Building on the availability heuristic (Tversky and Kahneman 1973, 1974; Bettman, John and Scott 1986, Pachur and Hertwig 2012), and affect heuristic (Finucane, Alhakami, Slovin, and Johnson 2000), the current research shows, through two studies, that a) DTCA reduces HO especially for older consumers (which is significant because older consumers need to be more proactive about their

health (Ruthig et al 2011) and are also likely to be the targets of DTCA (DeLorme, Huh, and Reid, 2006) , b) the relationship between DTCA and HO is moderated by consumers' loneliness (Gierveld and Tilburgh 2006) and c) the influence of age on HO is moderated by consumers' health anxiety. This hitherto unexplored dark side of DTCA has significant consumer welfare implications.

DTCA has seen unprecedented growth, with total spends reaching \$29 Billion in 2016 (Schwartz and Woloshin 2019) - it is this pervasive nature of DTCA, led by burgeoning advertising expenditures that leads to increasing consumer exposure to such ads, which, in turn, potentially intensifies the effects of the availability and affect heuristics. DTCA has received extensive attention in marketing literature, (e.g., Narayanan, Chintagunta, and Desiraju, 2004, Wosinska 2005, Delbaere and Willis, 2015; Schwartz and Woloshin 2019). DTCA has also long been controversial with arguments for and against (Lee, Salmon and Paek 2007). While several important arguments have been made against DTCA, the current research uncovers something extant research has not explored – the effects of DTCA on consumers' HO. This research breaks new ground in three important ways. Firstly, from a theoretical perspective, marketing literature has thus far primarily investigated trends and expenditures on DTCA, (e.g. Schwartz and Woloshin 2019), pros and cons of DTCA (e.g. Ventola 2011, Auton 2004), determinants of its persuasive effects (e.g. DeLorme et al 2006,) and its effects on compliance (e.g. Wosinska 2005) but not investigated DTCA's potential effects on consumers' inherent orientation such as HO. Secondly, the current research brings together literatures from psychology, healthcare, and marketing to investigate the relationships between loneliness, health anxiety, DTCA and consumers' health optimism. Thirdly, the unmasking of this dark side of DTCA has significant consumer welfare implications.

Literature Review

Direct to Consumer Pharmaceutical Advertising (DTCA)

The role of marketing in healthcare has become more prevalent in consumers' everyday life (e.g., Tian, Sautter, Fisher, Fischbach, Luna-Nevarez, Boberg, Kroger and Vann 2014). Historically, persuasive efforts by marketers were directed towards doctors as intermediaries and consumers were not targeted directly (Auton 2004). However, in 1983, the FDA began allowing advertising of pharmaceuticals directly to the public through mass media messages. DTCA is now considered a necessity because of the monumental R&D costs and competitive pressures in the industry (Stros and Lee, 2015). The likelihood of a physician prescribing a drug is directly related to the advertising expenditure on the drug (Zachry et al 2002) and the drugs most heavily advertised record the most sales (Auton 2004), which is why pharmaceutical advertising has burgeoned to \$5.6 billion in 2016 (Mailankody and Prasad, 2017) and total healthcare marketing has risen from \$17.7 billion in 1997 to \$29.9 billion in 2016 (Schwartz and Woloshin 2019).

DTCA can be in the form of disease-awareness ads, reminder ads or product claim aids. Disease awareness ads provide information about a medical condition, encouraging patients to contact their physician without mentioning a product or brand; in many countries this is the only type of DTCA advertising allowed (Mailankody and Prasad 2017). The second category of DTCA is referred to as “reminder ads” (Ventola 2011) that do include the product name and provide information about the strength, dosage, and/or price but are silent on indication or any specific claims. The final category, “product claim ads” not only mention the product and indication but

also tout its efficacy and safety. The three categories, in that order, are subject to progressively more stringent FDA regulatory restrictions (Ventola 2011). In the current research, the disease-awareness type of DTCA (the least regulated) has been used in the studies.

Consequences of DTCA

Commensurate with the rise in spending on DTCA has been the attention scholars have directed towards it (e.g., Kaphingst et al. 2004; Roth 1996, Doucette and Schommer 1998). Research has investigated consumer awareness of and reactions to DTCA (Everett, 1991), consumers' attitude towards (Desphande et al. 2004; Mehta and Purvis 2003; Williams and Hensel 1995) and perceptions of (Huh, DeLorme, and Reid 2004) DTCA, and physicians' attitudes towards DTCA (Paul, Handlin, and Stanton 2002). Research has also examined ways for marketers to increase ad effectiveness (e.g., Narayanan et al 2004; Delbaere and Willis 2015, Astuti and Nagase 2014). Literature also exists on the public health effects, (Peyrot et al. 1998; Weissman et al. 2003), economic impact (Kopp and Sheffet 1997) and policy implications of DTCA (Calfee 2002).

DTCA has been criticized for unnecessarily increasing prescriptions (Hoffman and Wilkes 1999) and demand for advertised drugs (Hollon 1999), for undermining the patient-provider relationship if patients pressure physicians into prescribing advertised drug brands (Lexchin and Mintzes 2002), for leading to prescription drug misuse and abuse (Findlay 2001) and overdiagnosis (especially by disease awareness ads, Mailankody and Prasad 2017). Doubts exist on whether information from DTCA is truthful and useful (Menon, Deshpande, Perri III, and Zinkhan 2002) or leads to better consumer communication with their doctors (Huh and Becker, 2005). DTCA is also known to increase patient visits, requests, prescriptions (Frosch, Grande, Tarn, and Kravitz 2010), and overuse (Kravitz et al 2005). Thus, there is considerable literature on the deleterious consequences of DTCA; however, one consequence – on consumers' inherent orientations and biases, such as health optimism has not been investigated thus far. While this particular effect is not very obvious, it is however important because health optimism is predictive of real health (e.g., Ruthig, Hanson, Pedersen, Weber, and Chipperfield, 2011).

Health Optimism (HO)

Optimism (pessimism) is the extent to which an individual generally expects positive (negative) experiences in the future (Scheier and Carver, 1985). Optimism and pessimism are predictive of how individuals react to stressful events (e.g., Chang, 2001; Scheier and Carver, 1985) with optimism (pessimism) being associated with coping mechanisms that reduce(increase) distress (Folkman and Lazarus, 1988). While optimism promotes problem-solving coping, positive reframing and reduces denial and distancing (Scheier et al 1986), pessimism promotes denial, substance abuse and avoidant coping (Billingsley et al 1993). Thus, optimism (pessimism) is adaptive (maladaptive) – indeed pessimism is part (item 15) of the *early maladaptive schema* (Young and Gluhoski 1996). Optimism/ pessimism are best conceptualized as a continuum and a consumer can be optimistic in one specific area of life (e.g., marriage/relationships) but pessimistic in another (e.g., financial) (Hecht 2013).

In healthcare, subjective health, (consumers' assessment of their own health), is a measure of health optimism, and predicts objective health, well-being, and mortality after controlling for objective health (Idler and Kasi 1995). Health optimism (pessimism) is adaptive (maladaptive) and important because it informs consumers' future behaviors, and choices (Ruthig et al 2011)

and has real consequences on objective health. **Health** optimists have better functional and psychological **health** (Ruthig and Chipperfield, 2007), engage more in healthy behaviors such as exercise (Hong et al 2005) and enjoy greater survival (Borawski, Kinney, and Kahana, 1996). **Health** pessimism is maladaptive even with good objective health (Ruthig et al 2011) and pessimists suffer more frequent and longer hospitalizations (Ruthig and Chipperfield, 2007). While psychological (trait optimism, depression), social (social support) and situational (life event stress) constructs have been studied as antecedents of HO (Ruthig et al 2011), marketing initiatives (e.g., DTCA) have not. The current research proposes that DTCA has an unintended consequence of reducing HO.

DTCA and health optimism

The link between DTCA and HO has not been established although there are several clues from extant literature that point to the link. Firstly, according to the availability heuristic (Tversky and Kahneman 1973, 1974; Bettman et al 1986; Pachur and Hertwig 2012), consumers' estimates of perceived risk are influenced by the availability or ease with which instances or occurrences come to mind. Telling is the example used by Tversky and Kahneman, (1974, p. 1127): “one may assess the risk of heart attack among middle-aged people by recalling such occurrences among one’s acquaintances.” For example, although high cholesterol is asymptomatic, DTCA for cholesterol-lowering medications makes the condition more salient (Wosinska 2005). Thus, greater DTCA exposure may make more disease conditions mentally available to consumers, increasing risk estimates of such outcomes and, consequently, lowering HO. Given the burgeoning expenditures on healthcare marketing as noted above, consumers are increasingly exposed to DTCA, making disease prevalence more cognitively available to them.

Secondly, according to the affect heuristic, people use their affective response to a risk to infer size of risk - positive (negative) affect towards a situation leads to a lower (higher) risk perception even without any other evidence in support (Finucane et al 2000). In DTCA, emotional appeals are highly effective (e.g., Kemp, Min, and Joint 2015) and heavily utilized (Delbaere and Willis 2015) and can be framed either positively (benefits gained) or negatively (benefits forgone) (Mathur, Jain, Hsieh, Lindsey, and Maheswaran 2013). A consequence of such DTCA could be consumers’ higher risk estimates of adverse health outcomes, leading to lower HO. Thus, it can be hypothesized that:

H1: Exposure to DTCA will reduce health optimism of viewers.

Age

HO, as a predictor of positive health behaviors (Ruthig et al 2011) is critical and important to study for the older population (Artistico et al 2000). Indeed, it seems that most DTCA is aggressively aimed at the older demographic (DeLorme, et al 2006) which is, ironically, likely to be more pessimistic in risk assessment. There is considerable literature on HO in the context of the elderly (e.g., Ruthig et al 2011, Artistico, Baldassarri, Lauriola, and Laicardi, 2000) and DTCA in the context of the elderly (e.g., DeLorme, et al 2006). For example, Lachman (1990), found older adults to adopt a more pessimistic explanatory style and report their health to be poorer than others' health. This is exacerbated by marketers who, in an attempt to target DTCA most efficiently, use age-appropriate media and creative strategies directed towards older consumers (DeLorme, et al 2006). Thus, it can be hypothesized that:

H2: Exposure to DTCA will reduce HO to a greater extent for older than younger viewers.

Loneliness

Loneliness influences subjective health such that presence (lack of) social support improves (hurts) subjective health (Cummings and Cockerham 2004; Poortinga, 2006) and corresponds with adverse mental health (Teo, Marsh, Forsberg, Nicolaidis, Chen, Newsom, Saha, and Dobscha, 2018) and physical health conditions (Tomaka, Thompson, and Palacios 2015). Loneliness is pervasive in the US, indeed termed an epidemic by its former surgeon general (Murthy 2020). Of the rich body of work on loneliness in marketing literature, the materialism-loneliness link is a significant sub-stream (e.g., Pieters 2013, Williams 2014, Lastovicka, and Sirianni 2011). Loneliness has also been investigated in the context of brand communities (Snyder and Newman. 2019), and preference for minority-endorsed products (Wang, Zhu, and Shiv 2012). The above literature, especially the loneliness-subjective health link, suggests the investigation of the potentially moderating influence of loneliness on the relationship between DTCA and health optimism. Specifically, it is hypothesized that loneliness will moderate the relationship between DTCA and HO such that:

H3) Exposure to DTCA will reduce HO to a greater extent for lonely than non-lonely consumers.

Health Anxiety

Health anxiety has been extensively investigated (for a review, please see Thorgaard, Frostholm, and Rask 2018) and is defined as the tendency to feel tension, discomfort, and anxiety about one's health (Snell, Johnson, Lloyd, and Hoover 1991). Marketing literature has also turned its lens extensively on consumer anxiety over the years (e.g., Pollay 1986, Grabe, Ward, and Hyde 2008; Borau and Bonnefon 2017; Lowe, Loveland, and Krishna, 2019; Darrat, Darrat, and Amyx 2016). Consumer anxiety is multiplied in healthcare marketing because consumers have additional feelings of anxiety when it comes to their health. (Lim and Ting 2012). For example, an individual's level of state health anxiety moderates the relationship between online health information seeking and health care utilization decision (c. f. White and Horvitz, 2009).

Health anxiety is comorbid with other anxieties and has its etiology in childhood (Thorgaard, Frostholm, and Rask 2018). Health anxious consumers are likely to be more sensitive to and seek information about disease (Singh and Brown 2014), are more aware of and misinterpret bodily sensations (Salkovskis, and Warwick 1986) and are more concerned about future health events (Snell et al 1991). This leads to a suspected moderating influence of health anxiety on the relationship between DTCA and HO such that health anxiety would exacerbate the effects of DTCA on HO. Thus, it can be hypothesized that:

H4) Exposure to DTCA will reduce HO to a greater extent for health-anxious than non-health anxious consumers.

Methodology

While it is highly likely that repeated exposure to several DTCA executions over time will have cumulative effects towards lowering HO in the long run (please refer to future directions section), the scope of the current research, the hypotheses, and the studies to test them pertain only to situational effects of a single exposure to DTCA.

Study 1

Measures: The Multidimensional Health Questionnaire (MHQ, Snell and Johnson 1997) is an inventory of health-related measures. Within this inventory, the five-item health expectations outcome subscale (please refer to Appendix) is a good measure of HO (Artistico et al 2000) and was used in the current research to operationalize HO with each item using a seven-point scale anchored by 1 = “disagree completely” and 7 = “agree completely.” As a measure of *attitude towards the ad*, participants also indicated whether they liked the ad they saw by responding to a single-item measure (“Did you like the commercial you just saw?”) anchored by 1 = “did not like at all” and 7 = “liked it a lot.”

To test the hypotheses, an experiment was conducted in which participants were exposed to either a generic ad or a DTCA. To identify the DTCA to be used, three coders rated a set of 24 advertisements available on YouTube. Because of the underlying mechanism (availability and affect heuristics), the stimulus needed to be able to strongly prime health related thoughts. The 3 coders were asked to rate the ads, on *ability to prime health related thoughts*-, (low = 1, high = 10) - a single-item measure of each coder’s perception of the ability of the ad to trigger health-related thoughts such that they become more cognitively available. The scores for the ads were averaged across the 3 coders. Two different DTCA ads with differing lengths (35 seconds and 60 seconds) with highest scores (8/10) on *ability to prime health related thoughts* were selected. An ad for Lumon balcony fittings (35 seconds) that scored lowest on *ability to prime health related thoughts* was chosen as the generic ad (please see appendix for ads).

MTurk was employed to conduct this study and two specific age categories offered by MTurk (“Age 18-25” and “Age 55 or older”) were selected. 156 participants took part, of which 82 belonged to the former category (categorized hereafter as ‘young’) and 74 belonged to the latter category (categorized hereafter as ‘old’). Thus, the experiment used a 2 (Ad type: generic versus DTCA) X 2 (Age category: young versus old) X 2 (DTCA length: 35 seconds versus 60 seconds) between subjects’ design. Participants were informed that they were part of an experiment looking into the effectiveness of an ad campaign. After a sound check (failed participants’ surveys were terminated), they were exposed to the ad before completing a filler task (counting backwards, Liu 2008), following which they were asked to respond to the five-item HO scale. The mean score for the five items became the dependent variable (HO).

Results

An ad type X age category X DTCA length 3-way ANOVA revealed that there was no three-way interaction between ad type, age category and DTCA length ($F(1, 148) = 2.12, p > 0.14$). DTCA length did not have a main effect ($F(1, 148) = 2.76, p > 0.09$) nor did it have any interaction effects with age category ($F(1, 148) = 0.55, p > 0.45$) or ad type ($F(1, 148) = 1.07, p > 0.3$). Furthermore, independent samples t tests showed that the 35 second ad did not differ from the 60 second in *attitude towards the ad* ($M_{35\text{second}} = 5.26; M_{60\text{second}} = 5.33; t = -.3, p > .7$). Consequently, all subsequent analysis was based on data collapsed across the two levels of DTCA length.

An ad type X age category 2-way ANOVA revealed that the ad type manipulation had a marginally significant effect on HO ($F(1, 152) = 3.55, p < 0.06$) providing support to H1. Age reduced HO ($M_{55+} = 4.04 < M_{18-25} = 4.64, F(1, 152) = 9.45, p < .003$). In support of H2, the two-

way interaction between ad type and age category was significant ($F(1, 152) = 3.95, p < .05$). Planned contrasts revealed that while the ad type manipulation had no influence on younger participants' HO ($F(1, 152) = 0.005, p > .1$), the older participants who saw the DTCA had significantly lower HO than those that saw the generic ad ($M_{DTCA} = 3.67 < M_{generic} = 4.42, F(1, 152) = 7.44, p < .025$) (figure 1). Further, DTCA reduced HO for older participants compared to the younger ($M_{old} = 3.67 < M_{young} = 4.65, F(1, 152) = 12.7, p < .001$) but there was no influence of the generic ad on old versus young participants' HO ($F(1, 152) = 0.58, p > .1$).

Study 2

Study 2 tested the moderating hypotheses pertaining to loneliness and health anxiety. 126 Participants were recruited on MTurk of which 58 were young ("Age 18-25" category) and 68 were old ("Age 55 or older" category). To minimize participant fatigue and potential confounds, loneliness ($N = 67$) and health anxiety ($N = 59$) were measured on separate subsets of the sample at the start of the study, the rest of the study being identical for both samples. Further, in this study, only the 35 second DTCA was used to test the hypothesis. In study 1, the generic ad was 35 seconds long, whereas the DTCAs were either 35 or 60 seconds. Results already revealed that duration of DTCA did not have any influence. However, although not statistically significant, the 35 second ad did reduce HO marginally more ($M_{35second} = 4.21; M_{60second} = 4.56; t = -1.7, p > .07$). To reduce fatigue and eliminate any possible confounds due to the differential duration of DTCAs, only the generic ad and the shorter DTCA from study 1 (both 35 seconds) were used in study 2.

Participants were told they were helping researchers understand internet search behavior. Following this, participants either completed the 6-item loneliness (Gierveld and Tilburg 2006) or the SHAI consisting of 14 health anxiety items (Salkovskis, Rimes, Warwick, and Clark 2002). Following the sound check, they were asked if they had performed a similar task recently (participants who either failed the sound check or had completed a similar survey were terminated). Participants then completed a dummy task pertaining to internet search before being exposed either to the generic ad or the 35 second DTCA which were the same as those used in study 1. Following this, participants completed the procedure as study 1.

Measures

The 6-item shortened version of loneliness has excellent psychometric properties (Gierveld and Tilburgh 2006) and was used in the current research (please refer to Appendix). Participants responded to all items on a seven-point scale anchored by 1 = "disagree completely" and 7 = "agree completely." The 14-item short version of the health anxiety inventory (SHAI) (Salkovskis, Rimes, Warwick, and Clark, 2002), is a prominent scale, (sample items included in Appendix) and was used to measure health anxiety. Participants responses on this scale are coded as 1: low; 4: High.

A median split was conducted for both loneliness and health anxiety scores; scores below (above) the median were classified as low (high) on loneliness and health anxiety, respectively. HO and health anxiety loaded on orthogonal constructs (Health Management and Negative Thinking respectively) in a factor analysis of several health-related constructs (Artistico et al 2000). To confirm this, study 2 formally tested for multicollinearity between HO and health anxiety, finding no multicollinearity between age and loneliness or between age and health

anxiety (variance inflation factor was 1 in both cases.). In the event of non-multicollinearity, median splits are recommended (Iacobucci, Posavac, Kardes, Schneider, and Popovich, 2015a and 2015b). As per the recommendations in literature, no correlating independent variable were tested in any of the analysis reported below.

Results

Overall: A 2 (ad type: generic versus DTCA) X 2 (age category: young versus old) X 2 (individual difference measured: loneliness versus health anxiety) between-subjects ANOVA revealed that both age and ad type influenced HO. Specifically, older participants were less optimistic about their health ($M_{old} = 3.94 < M_{young} = 4.44$, $F(1,118) = 5.5$, $p < .03$) and, in support of H1, the DTCA reduced health optimism compared to the generic Ad ($M_{DTCA} = 3.74 < M_{generic} = 4.63$, $F(1,118) = 17.26$, $p < .001$). Whether loneliness or health anxiety was measured did not have any influence ($F(1,118) = 3.4$, $p > .07$). Further, consistent with study 1, there was a significant two-way interaction between age and ad type ($F(1,118) = 4.75$, $p < .03$) (figure 2) in support of H2. Planned contrasts revealed that while the ad type manipulation had no influence on the younger participants' HO ($F(1,118) = 2.03$, $p > .1$), the older participants who saw the DTCA had significantly lower HO than those that saw the generic ad ($M_{DTCA} = 3.26 < M_{generic} = 4.61$, $F(1,118) = 20.88$, $p < .001$) (figure 2). Further, the DTCA reduced HO for older participants compared to the younger ($M_{old} = 3.26 < M_{young} = 4.23$, $F(1,118) = 10.76$, $p < .03$) but there was no influence of the generic ad on old versus young participants' HO ($F(1,118) = 0.02$, $p > .1$).

Moderation by Loneliness: to test H3, the effects of ad type, age and loneliness on HO were examined in a 2X2X2 ANOVA for all participants who completed the loneliness scale (N=67). While age did not influence HO ($F(1,59) = 2.67$, $p > .1$), ad type did such that DTCA reduced health optimism compared to the generic Ad ($M_{DTCA} = 4.0 < M_{generic} = 4.9$, $F(1,59) = 9.9$, $p < .004$) in support of H1. Loneliness reduced HO ($M_{lonely} = 4.09 < M_{non-lonely} = 4.81$, $F(1,59) = 6.35$, $p < .02$) but there was no significant two-way interaction between age and ad type ($F(1,59) = 1.83$, $p > 0.1$).

Although there was no interaction between age and loneliness ($F(1,59) = 0.007$, $p > .9$), there was a significant interaction between ad type and loneliness ($F(1,59) = 4.17$, $p < .05$) in support of H3 (please refer to figure 3). Planned contrasts revealed that while the ad type manipulation had no influence on the non-lonely participants' HO ($F(1,59) = 0.72$, $p > .1$), lonely participants who saw the DTCA had significantly lower HO than those that saw the generic ad ($M_{DTCA} = 3.35 < M_{generic} = 4.83$, $F(1,59) = 15.99$, $p < .001$). Further, the DTCA reduced HO for lonely participants compared to the non-lonely ($M_{lonely} = 3.35 < M_{non-lonely} = 4.65$, $F(1,59) = 12.37$, $p < .001$) (figure 3) but there was no influence of the generic ad on lonely versus non-lonely participants' HO ($F(1,59) = 0.14$, $p > .1$).

Moderation by Health Anxiety: To test H4, the effects of ad type, age and health anxiety on HO were examined in a 2X2X2 ANOVA for all participants who completed the health anxiety scale (N=59). Age did not influence HO ($F(1, 51) = 3.09$, $p > .08$) but, in support of H1, ad type did influence HO such that DTCA reduced health optimism compared to the generic Ad ($M_{DTCA} = 3.63 < M_{generic} = 4.34$, $F(1,51) = 4.6$, $p < .04$). Unlike study 1, there was no interaction between ad type and age category ($F(1, 51) = 1.2$, $p > .2$), or between ad type and health anxiety ($F(1,$

51) = 0.00, $p > .99$) thus not finding any support for H4. Health anxiety itself also did not significantly influence HO ($F(1,51) = 1.8, p > 0.1$). However, there was a significant two-way interaction between health anxiety and age ($F(1,51) = 4.39, p < .04$) (figure 4). Planned contrasts revealed that while health anxiety did not influence HO of the younger participants ($F(1,51) = 1.35, p > .1$), the older health anxious participants did exhibit lower HO ($M_{\text{high health anxiety}} = 3.117 < M_{\text{low health anxiety}} = 4.26, F(1,51) = 28.4, p < .001$) than older non health anxious participants. Further, even among the health anxious participants, the older participants' HO was significantly lower than the younger ($M_{\text{old}} = 3.117 < M_{\text{young}} = 4.4, F(1,51) = 35.79, p < .001$) (figure 4).

Supplemental Analysis

Measurement effects: It is possible that the mere measurement of either loneliness or health anxiety could have primed the participants and influenced HO. Study1 did not include any measurement while in study 2 either loneliness (N = 67) or health anxiety (N = 59) were measured at the start. To investigate the effects of the measurement (or not) of loneliness or health anxiety on HO, the pooled data from both studies was reanalyzed including a third independent variable called *measurement of individual difference* (none versus loneliness versus health anxiety). A 2 (ad type: generic versus DTCA) X 2 (age category: young versus old) X 3 (measurement of individual difference: none versus loneliness versus health anxiety) ANOVA revealed that whether or not any measurement of individual difference (none, loneliness or health anxiety) was taken at the start of the study did not have any influence on HO ($F(1,270) = 2.1, p > .1$), nor did it interact with ad type ($F(1,270) = 1.6, p > 0.2$) or age category ($F(1,270) = 0.38, p > 0.6$).

Attitude towards Ad: to investigate the potential role of *attitude towards ad*, which was measured in both studies, a separate analysis was conducted by pooling data from the two studies using the two factors common to both studies (ad type and age category). A 2 (ad type) X 2 (age category) ANOVA with *attitude towards ad* as the dependent variable revealed that neither ad type ($F(1, 278) = 1.8, p > .1$) nor age ($F(1, 278) = 1.1, p > 0.2$) influenced *attitude towards ad*. However, the two-way interaction between age and ad type ($F(1, 278) = 7.4, p < .008$) was significant; to eliminate any possibility of *attitude towards ad* being an alternative explanation, deeper analysis was conducted.

Planned contrasts revealed that older participants did not like either ad differentially ($F(1, 278) = 0.96, p > .1$) nor was the DTCA liked differentially by older or younger participants ($F(1, 278) = 1.39, p > .1$) conclusively eliminating *attitude towards ad* as an alternative explanation for the effects seen earlier for HO. However, the other two planned contrasts revealed an interesting pattern. Younger participants seemed to like the DTCA more than the generic ad ($M_{\text{DTCA}} = 5.28 > M_{\text{generic}} = 4.55, F(1, 278) = 8.23, p < .025$) and older participants seemed to like the generic ad more than the younger participants ($M_{\text{old}} = 5.23 > M_{\text{young}} = 4.55, F(1,278) = 7.14, p < .025$). This pattern of results in the last two contrasts could be because of the way marketers target their ads. Younger participants, being less targeted by DTCA, seemed to like it more perhaps because they found it novel, while the reverse was true for the older participants who found the generic ad novel and liked it a bit more – a potential reflection of the tyranny of DTCA that is aimed aggressively at older consumers (DeLorme, et al 2006).

A 2 (ad type: generic versus DTCA) X 2 (age category: young versus old) between-subjects

ANOVA on the pooled data across study 1 and 2 revealed that both age and ad type influenced HO. Specifically, older participants were less optimistic about their health ($M_{old} = 4.06 < M_{young} = 4.54$, $F(1,278) = 15.34$, $p < .001$) and, in support of H1, the DTCA reduced health optimism compared to the generic Ad ($M_{DTCA} = 4.03 < M_{generic} = 4.57$, $F(1,278) = 16.06$, $p < .001$). Further, there was a significant two-way interaction between age and ad type ($F(1,278) = 7.89$, $p < .006$) in support of H2.

Discussion

Both H1 and H2 found support in studies 1, 2 and the pooled analysis, showing strong evidence for the maladaptive influence of DTCA and the moderating effect of age on the deleterious effects of DTCA on HO. H3 and H4 were tested only in study 2; H3 found strong support showing that lonely consumers seem to be more vulnerable to the maladaptive influence of DTCA. Clearly, age moderates the influence of DTCA on HO, and so does loneliness. H4 did not find support - while health anxiety does not moderate the role of DTCA on HO, it does seem to moderate the influence of age on HO with older health-anxious consumers being more vulnerable to the effects of DTCA than younger health-anxious consumers.

General Discussion

Through two studies this research demonstrates that DTCA depresses HO especially for older, lonelier, and older health-anxious viewers. *Attitude towards the ad* was not influenced by ad type or age, suggesting that the effects of the DTCA on HO were independent of *attitude towards the ad*. A decline in HO is only the first step that will lead to apathy, and unhealthy behaviors (Ruthig et al 2011). As a result of the frenetic marketing activity by pharmaceutical companies, healthcare providers, physicians, and insurers, the consumer is likely to feel further pessimistic and avoidant (Scheier et al 1986) towards their health, relying more on medication than prevention and adoption of a healthy lifestyle. Indeed, DTCA is designed to and succeeds in, increasing physician visits, prescription requests, and prescriptions (Findlay 2001, Kravitz et al 2005, Frosch et al 2010) – it can be argued that conditions are favorable for the self-interest of the healthcare industry but may not be in the best interest of the consumer. The moderating effects of age point to the irony that the consumer who DTCA is mostly geared towards (DeLorme, et al 2006) is also the most vulnerable to the unintended consequence. Similarly, the moderating role of loneliness points to the loneliness epidemic that could further worsen the situation. The more DTCA we expose the nation's lonely and elderly to, the less optimistic and, consequently, the less likely to adopt positive health habits they are likely to be.

Both in marketing and healthcare literature, advertising has long been recognized to have unintended consequences and negative effects (e.g., Lexchin and Mintzes 2002) but this is the first time an inherent consumer orientation such as HO that potentially has implications for consumers' lifestyles, choices, and behaviors, has been investigated in this regard. This research used simple stimuli and a simple study design but makes a significant contribution to marketing literature by opening the door for a wide range of future research directions.

Limitations and future research

The DTCAs used in studies 1 and 2 were disease-awareness and reminder type of DTCAs that were age-agnostic as supported by the fact that *attitude towards the ad* did not vary by age. Future research must investigate the influence of other types of DTCA on HO. It can be argued

that the younger participants especially in study 2 may have liked the DTCA marginally more than the generic ad but did not find the message (atrial fibrillation) particularly *relevant* to them. Future research should examine potential DTCA-specific moderators (such as relevance, tone and style of the ad, music etc.)

The current study only looked at immediate effects of one exposure to DTCA. There is no account for the long-term, cumulative effects of DTCA or even of the longevity of the effects seen in the current studies. As considerable evidence shows (e.g., Schwartz and Woloshin 2019), the DTCA industry is flourishing as a result of which, consumers are bombarded with high quality, compelling DTCA. The cumulative, compounded effect of such DTCA is likely to be immense. This is an area that must be investigated by future research using longitudinal studies.

Message framing could make a difference between hope and despair as shown by some evidence that while positive appeals raise hope, negative ones do not (Mathur, et al 2013) and that this effect is moderated by involvement (or disease morbidity in patient). It is likely that even within DTCA, the framing of a specific ad will moderate the influence of the ad on HO. This can be the primary relationship for a future research article to untangle.

Implications

This research not only warrants the need for further investigations of DTCA but also the exploration of public policy regarding DTCA. The discourse on DTCA is contentious – only two countries in the world allow DTCA and there is considerable debate on the pros and cons of DTCA (Auton 2004). There have been several cries and concerted attempts to ban DTCA that have been suppressed due to freedom of speech, and commerce considerations (Ventola 2011). The current research contributes to this debate by adding a hitherto unexplored consequence to the list, providing another reason to evaluate the wisdom of allowing DTCA in its current form.

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Figure 1 :Effect of Ad Type and Age Category on Health Optimism

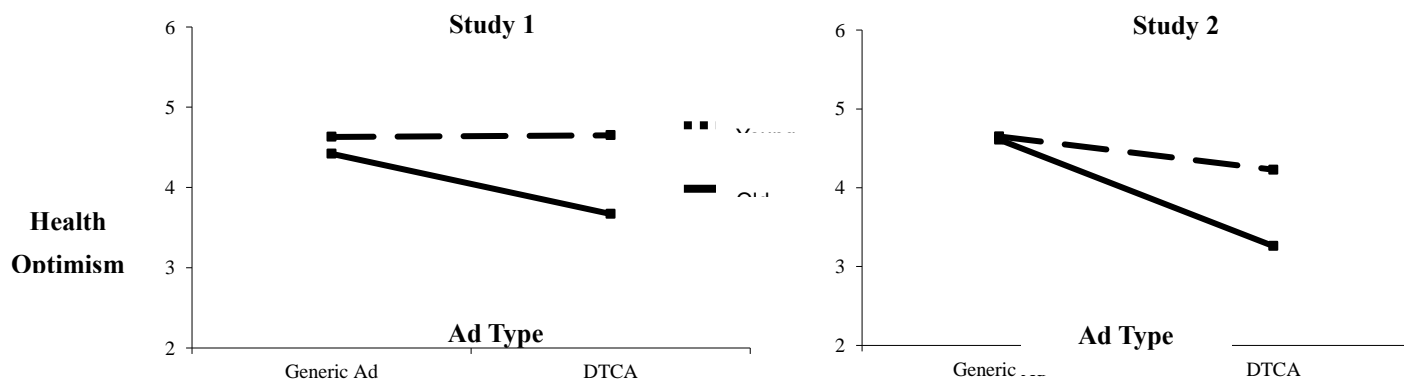


Figure 2: Effect of Ad Type and Loneliness on Health Optimism (Study 2)

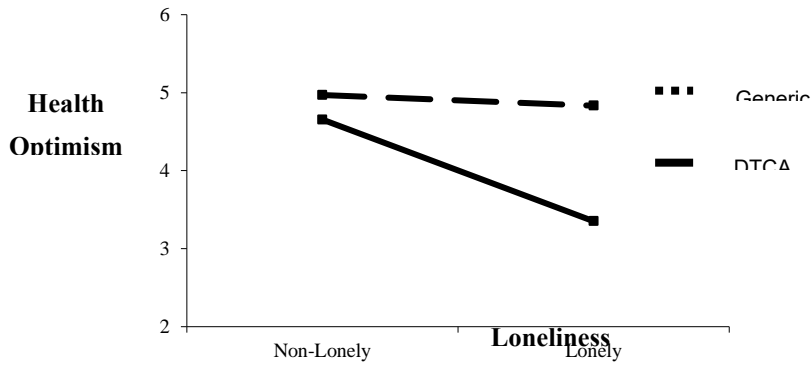
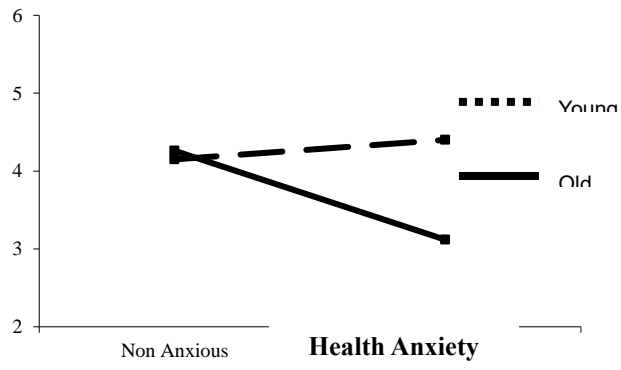


Figure 3: Effect of Age category and Health Anxiety on Health Optimism (Study 2)



Track: Healthcare Marketing
 ID#: 1765

MARKETING EDUCATION/EXPERIENTIAL LEARNING

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Keys To Utilizing Teamwork Effectively in College Courses

BEST ABSTRACT IN TRACK

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Keywords- Teamwork, Student Satisfaction, Group Projects, Team Formation, Interpersonal Skills, Workload Sharing, Communication Skills, Conflict Resolution Skills

Relevance to Marketing Educators, Researchers and/or Practitioners- Using a criterion-based team formation method and teaching teamwork skills when assigning team projects will increase student satisfaction with working in teams. Increased student satisfaction should encourage professors to use teamwork in their college courses, which will build student teamwork skills needed in the workplace.

Extended Abstract

Employers are seeking enhanced skills from potential candidates; thus, higher education accreditation organizations, such as AACSB, are requiring curriculum and learning materials in business programs of study to prepare college students for academic and professional success. In addition, the National Association of Colleges and Employers (NACE) reported in 2024 that one of the two most important employee attributes is strong teamwork skills (Gray, 2024).

Many research studies have identified the need for group assignments to develop teamwork skills during college students' academic coursework. Advantages of teamwork include exposure to a variety of member backgrounds, the stimulation of creativity, higher levels of comprehension and commitment, the opportunity to understand oneself better, and improved interpersonal skills (Burke, 2011; Cuseo, 1996; Huff, 2014; Larsen et al., 2021; Orlando, 2017; Thompson-Abbott, 2020; Wright et al., 1998).

Despite the need for students to have strong teamwork skills, and the advantages of having them, many professors shy away from assigning group projects. Informal conversations with other business faculty have illuminated concerns about low student satisfaction with group projects, the threat of poor student evaluations, and the difficulty of managing team conflicts. Other business professors require group assignments, but entrust students to muddle through the process without direction, leaving us to wonder whether students are really developing stronger teamwork skills or just struggling through as individuals in a group.

The purpose of this study is to find ways to increase student satisfaction with working in teams in college business courses. The authors hypothesize that if professors create opportunities for demonstrating more effective teamwork skills by: a) forming teams using the criterion-based selection method and b) teaching teamwork skills such as workload sharing, interpersonal, communication, and conflict resolution, students will be more likely to report increased satisfaction with working in teams.

Team Formation

Criterion-based selection achieves Haas and Wotruba's (1990) recommendation of placing students in "positions where they can contribute effectively to the project and have a beneficial learning experience" (p. 41). The authors of the present study believe that criterion-based selection enhances effective workload sharing, which is correlated to increased student satisfaction with teamwork (Pang, Tong, & Wong, 2011). When students know their expected roles and responsibilities on the team, they are more likely to make significant contributions. The authors of this study have used six criteria in their teamwork projects for self-reporting individual skills: writing, speaking, research, creativity, leadership, and organization. These criteria were selected to ensure the presence of necessary skills for business class projects and to parallel roles and responsibilities of group members used in previous studies (*Roles and responsibilities for group members*, n.d.). Although the authors utilize the six criteria mentioned above for their projects, the criteria can be changed according to the skills needed for the class project or assignment. For example, group projects involving financial statement analysis may require that students self-report on proficiency using data analytics, Excel, or other software programs. The necessary skills may vary with the project, the subject matter, and the level of the course.

Teaching Teamwork Skills - The Why?

Once the teams are formed, assigning group projects alone does not result in stronger teamwork (Burke, 2011). Many students have encountered unequal workloads or conflict in previous group projects which have created frustration with this teaching method. Consequently, professors cannot assume that students possess strong teamwork skills to deal with these issues; therefore, they should take time to teach teamwork skills to increase the effectiveness of team projects. Research suggests a strong correlation between students' satisfaction with teamwork and four specific learned skills: workload sharing, interpersonal, communication, and conflict resolution (Pang, Tong, & Wong, 2011; Pang & Hung, 2012; Pertegal-Felices, et al., 2019). Therefore, the authors believe that professors should specifically address these skills when teaching students how to navigate team projects.

Teaching Teamwork Skills - The How?

Based on the above information, professors must incorporate ways to teach workload sharing, interpersonal, communication, and conflict resolution skills. Stagers, et al. (2008) recommended using team-building exercises to assist student groups with team development as a recursive process where student teams receive ongoing assistance throughout the semester. They proposed that the biggest challenge with group projects is helping groups of students become teams, and they concluded that "teamwork most successfully occurs after team building" (Stagers, et al., 2008, p. 486).

Examples of team-building exercises include:

- Workload sharing- Provide and review assignment guidelines to ensure students understand the assignment goals, outcomes and deadlines. Have students discuss roles and responsibilities based upon the individual skills on the team.
- Interpersonal and communication skills- Facilitate getting to know one another with introductory exercises (e.g., discussion prompts about effective team skills and past

experiences). Ask students to articulate their own goals for the course and create team goals for the semester.

- Workload sharing and communication skills- Have teams develop and discuss the team rules and express their individual values (influencing the rules) in relation to the project. Have each group submit a team contract and weekly progress reports outlining what the team has accomplished, who attended the team meetings, and team goals for the upcoming week.
- Conflict resolution skills- Introduce the Thomas-Kilmann Conflict Mode Instrument (Kilmann, 2011) to help students understand the conflict-handling modes (e.g., collaborating, competing, compromising, accommodating, and avoiding) by providing case study activities wherein teams practice applying the most effective mode to the given case.

Plans for Future Research

The authors will conduct a study to evaluate student satisfaction with teams when the criterion-based method of forming teams is used and the teamwork skills of workload sharing, interpersonal, communication, and conflict resolution are taught. Selected professors who have agreed to use these methods with their teamwork assignments will distribute the survey at the end of the semester to students in their business courses. The authors will look for correlations between the students' self-reported teamwork skills (independent variable) and student satisfaction with teams (dependent variable).

When students are assigned to teams according to their strengths and taught workload sharing, interpersonal, communication, and conflict resolution skills, the authors propose that students are more likely to be satisfied with teamwork assignments, and professors will be more apt to adopt teamwork as a method of pedagogy. These measures will ultimately build student teamwork skills necessary for the modern workplace.

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Track: Marketing Education/Experiential Learning
ID#: 1767

Man vs. Machine: Who gets better MBA grades?

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Abstract

Since the launch of ChatGPT in November 2022, fears of significant disruption and perhaps even the doom of higher education have abounded. This research aims to investigate if generative AI is, in fact, better than the average MBA student. At the end of an 8-week asynchronous online Marketing Strategy course that explored AI use in marketing and allowed AI use for brainstorming and writing, students were allowed to elect to complete an assignment either using AI or not. Across six course sections, starting in the summer of 2023 and concluding in the spring of 2024, human-generated content consistently earned higher grades than AI-generated content. Although a simple examination of time spent was significantly lower for AI-generated content, when grades were controlled for, this difference was mitigated. Student and faculty reflections supported the idea that, at this point, AI is incapable of producing quality MBA work.

Keywords: Higher Education, Generative AI, Student Learning, Assessment

Relevance to Marketing Educators, Researchers, and/or Practitioners: Fear that AI can do the work for students and derail assessment and learning has been rampant since the launch of ChatGPT in November 2022. This research finds that student use of generative AI to complete assignments is readily apparent to the instructor and, at least without significant revising, editing, and updating, inferior to human-generated content.

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Track: Marketing Education/Experiential Learning
ID#: 1758

Faculty, Be the Nudge For Your Students' Personal Brand!

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Abstract

Students that build their personal brand while pursuing their undergraduate degree can differentiate themselves from their peers prior to graduation. Faculty can serve as the gentle nudge in this process by encouraging students to start early and by including elements of personal branding in their coursework. This study provides a review of personal branding elements included in current undergraduate courses along with a proposed model for an integrated personal brand approach. The study concludes with exit interviews from seniors in a marketing capstone course in a Mid Atlantic University sharing their personal branding experience. Finally, this study provides new insight for future personal branding projects in the classroom.

Keywords: Personal Brand, Student Brand, Integrated Personal Brand Approach, Authentic Self

Relevance to Marketing Educators, Researchers and/or Practitioners: Faculty play a critical role in helping undergraduate marketing students understand the importance of building a personal brand as they pursue their studies.

Introduction

The topic of building a strong brand is not limited to companies, organizations, entrepreneurs, celebrities, and athletes. As marketing has evolved it has become increasingly clear, everyone is a brand – individuals, young professionals and even students! Those that can communicate who they are and articulate the value of their brand will be more successful. (Allison et al., 2020) (Castrillon, 2019)

Corporate and professional brands emphasize the importance of authenticity, personalization and creativity and these same principles apply to personal brands of students engaged in collegiate study. (Brandwatch, 2023) (Santiago, 2024) (Naceva, 2024)

Students must navigate multiple competing demands while engaged in their undergraduate studies including course requirements, campus life, internships and job responsibilities. Faculty can provide that gentle nudge to encourage students to start the personal branding process sooner rather than later. Elements of personal branding can be incorporated into existing coursework or facilitated through special projects courses on personal branding.

Literature Review

Building and leveraging a professional network through platforms like LinkedIn and completing personal development courses and certifications while in college can provide significant benefits to new graduates that often lead to quicker full-time employment opportunities in the industry

and a reduced likelihood of facing underemployment for a year or more following graduation. (Kelly, 2024) Underemployment as discussed by Burning Glass Institute and Strada Institute for the Future of Work refers to a growing number (52-percent) of college graduates that are working jobs below their skills or ability such as working part-time or in a field outside their industry like retail for a year or more following graduation. (Burning Glass Institute and Strada Institute for the Future of Work, 2024)

Even though the job outlook for marketing college graduates continues to grow faster than the average for all occupations (5-7 percent versus 3 percent), recent marketing graduates still report many challenges in the job market following graduation tied to an extremely competitive market and unrealistic professional experience for entry level positions. (Bureau of Labor Statistics, 2024) A search for marketing entry level positions on the AMA Job Board produced 718 results while a similar search on the PRSA Jobcenter produced 184 results. (AMA Job Board, 2024 and PRSA Jobcenter, 2024) Several job announcements required three or more years of experience in the industry. The Hechinger Report, a national nonprofit news outlet focused on education, concurs with the aforementioned findings and identified the rise in career preparation in college including jobs skills and competencies in the classroom, which are tied to personal branding (Hechinger Report, 2023).

Tom Peters first challenged consumers to think of themselves as a personal brand in 1997 in a cover story in FastCompany (Peters, 1997). “Regardless of age, regardless of position, regardless of the business we happen to be in, all of us need to understand the importance of branding.” Peters says each individual must do what it takes to be “CEO of Me Inc”. and that means being head marketer for your brand. Peters challenges each consumer to determine what it is that really makes them stand out. He says put it in writing and embrace it by reading and believing it.

Since Peters, personal branding has been studied across a wide range of disciplines and fostered multiple diverse ideas on how it should be applied within a discipline. Gorbatov, Kahapova and Lysova analyzed one hundred papers on personal branding to better understand the diversity of personal branding definitions and identify definitions most representative of a powerful and authentic personal brand. (Gorbatov et al., 2018)

A widely accepted definition of personal branding included in Gorbatov’s seven most relevant personal branding views presents personal branding as “a way for individuals to differentiate themselves by identifying their unique value proposition and communicating it effectively and consistently.” (Stanton & Stanton, 2013). This definition was also applied for the purpose of this study.

Since Gorbatov’s analysis, faculty have incorporated personal branding assignments into existing courses and developed stand-alone courses and certificate programs in the area of personal branding.

Personal Branding Course Offerings

For this paper, the author conducted a review of courses on personal branding in spring 2024. Fourteen different courses were identified on personal branding. The majority of the courses, 12

of the 14, were offered at the undergraduate (UG) level, the remaining were graduate (GRAD) courses. Eight of the courses were offered by the Business School (BUS) , three were offered by Communications (COMM) and the remainder included the School of Continuing Studies (CONT), Applied Arts & Sciences (AAS) and Human Services (HS). Personal branding was a central component to all but two of the courses.

Figure 1: Personal Branding Course Offerings							
University / College	Course	UG / GRAD	Program Offering	Personal Branding Central to Course	Key Elements Present	Presentation	Additional Notes
Christopher Newport University	Honors 313 Personal Marketing	UG	BUS	Y	SWOT Pitch Platform	Y	Course retired with retirement of faculty member in 2018.
The Citadel	MKTG 302 (Personal Branding & Networking)	UG	BUS	Y	SWOT Pitch Platform Cert	Y	This course includes several unique elements: weekly executive in residence, speed branding event as a final exam, business cards, and 12 informational interviews. In addition, The Citadel offers a separate Create Your Own Adventure Course for certifications.
Dauphine Universite Paris	01BUSY20 Personal & Business Branding	UG	BUS	Y	Platform	N	This course includes two written reports.
Georgetown University	MPPR-891-01 Public Relations & Corporate Communications	GRAD	CONT	Y	SWOT Pitch	N	There is a written report but no oral report.
Texas A & M Commerce	CID 356 Personal Branding & Identity	UG	AAS	Y	SWOT Pitch Platform	Y	A series of blog posts are required throughout the course.
UNC Greensboro	HHS/ENT 275 Entrepreneurial Personal Branding	UG	HS	Y	SWOT Pitch Platform	Y	Other elements include a vision board, logo, cover letter, resume, personal interview, and career/networking event.
UC Davis	Residential Course Personal Branding	GRAD	Business	Y	Pitch	Y	This course includes a visioning exercise and is broader in nature.
Union University	MKTG 228 Principles of Marketing	UG	Business	N	SWOT Pitch	N	While personal branding is not central to the course, the course does include a Personal Branding Workbook.
Universita Cattolica del Sacro Cuore	No course number provided. Personal Branding	UG	Communi cation	Y	SWOT Pitch Platform	N	The course does include a Mock Interview, Cover Letter and CV.
University of Florida	MMC 3030 Personal Branding for Communicators	UG	Communi cation	Y	Pitch Platform	Y	The course also includes a job interview, resume and cover letter.
University of Texas at Austin	MKTG 363 Professional Selling & Sales Management	UG	Business	N	Pitch Platform	N	Project includes choice of LinkedIn Profile, Video Pitch, or other options.

University of Zurich	BOEC 0389 Personal Branding and Social Media Marketing	UG	Business	Y	Pitch Platform	Y	The course includes the creation of a Word Press site and multiple social media platforms.
Western Sydney University	COMM 3046 Personal Branding Strategies	UG	Communication	Y	Pitch Platform	N	This course is focused on writing short talks and presentations.
Youngstown State University	MKTG 3702 Business Professionalism	UG	Business	Y	Pitch Platform	Y	Other elements not measured present such as development of cover letter, resume and interview and etiquette dinner.

The syllabus for each course was reviewed to determine the presence of these four key personal brand elements – a personal SWOT analysis, an elevator pitch or personal branding statement, the creation of a social media platform and if a marketing certification was required. Only one of the courses, MKTG 302 at The Citadel, required a marketing certification. The most common requirements (10 of 14 offerings) included the completion of an elevator pitch or personal branding statement and development of a presence on at least one social media platform. Five of the courses required completion of a personal SWOT analysis, elevator pitch or branding statement and creation of a presence on a social media platform. The courses were about evenly split on whether or not a final oral presentation was required. Other required elements observed in the courses included visioning board, cover letter, resume, business cards, and some form of interview.

Studies Tied to Personal Branding

Self-awareness and understanding one’s strengths and weaknesses is essential to building a personal brand along with effective presentation on social media platforms (Johnson, 2017). Faculty can help offset areas where students feel they have gaps tied to personal branding such as lack of an internship relevant to the major, an internship at a reputable company, being self-disciplined, etc. Curricular and extra-curricular activities fostered by faculty can improve a student’s overall perception of their personal brand. (Girard & Lysiak, 2020).

Students must demonstrate professional knowledge and skills on social platforms like LinkedIn as they develop their personal brand. Johnson’s LinkedIn assignment encourages connection to peers and professional organizations tied to the major. There is not one approach or even one platform to building a successful personal brand. Authenticity, knowledge, experience, and skills are all important. Students are encouraged to use multiple platforms as they build their personal brand. It is an ongoing process that involves self-reflection, evaluation and updating.

Allison et al also highlighted the value of teaching personal branding. (Allison et al., 2020) The study examined how personal brand concept belief (does the individual perceive themselves to have their own unique brand) and personal brand management efficacy (the perception of their skill) positively influences personal brand authenticity which in turn positively influences self-actualization. When students effectively present an authentic brand, they are seen as more favorable which in turn increases employment prospects. Faculty can teach skills in personal branding through professional social media assignments in LinkedIn, blogging, Pinterest, and others.

Shabu and Vasanthagopal also looked at how social media marketing on platforms like LinkedIn can be used to further personal branding. Students must establish themselves on LinkedIn, form connections with the right audience and seek new learning opportunities through certifications and workshops. (Shabu & Vasanthagopal, 2015)

Zhao audits the Peters' idea of "Me Inc." through an interactive LinkedIn classroom assignment. (Zhao, 2021) Students must first create a LinkedIn profile if they do not already have one, find a desired job post and then manage their LinkedIn profile in line with the job post. Follow-on activities in the classroom allow students the opportunity to evaluate a peer's personal branding effort and see how they compare with their peers. Zhao positions personal branding as a strategic process involving creating, positioning, and maintaining a positive personal brand impression.

Azimi also examines personal branding as a strategic process but through the lens of entrepreneurs. (Azimi, 2014) Entrepreneurs must manage their brand through the social platform they adopt, social content they share and social interactions they create. Maintaining a consistent message and image is key.

A Proposed Model for an Integrated Personal Brand Approach

Based on the literature review and existing personal branding coursework, a personal brand is comprised of multiple factors. There does not appear to be a single "correct" approach. One thing is clear, just like marketing, an integrated approach is advised for personal branding.

What might an Integrated Personal Brand approach look like?

Step 1: Prepare Personal SWOT Analysis

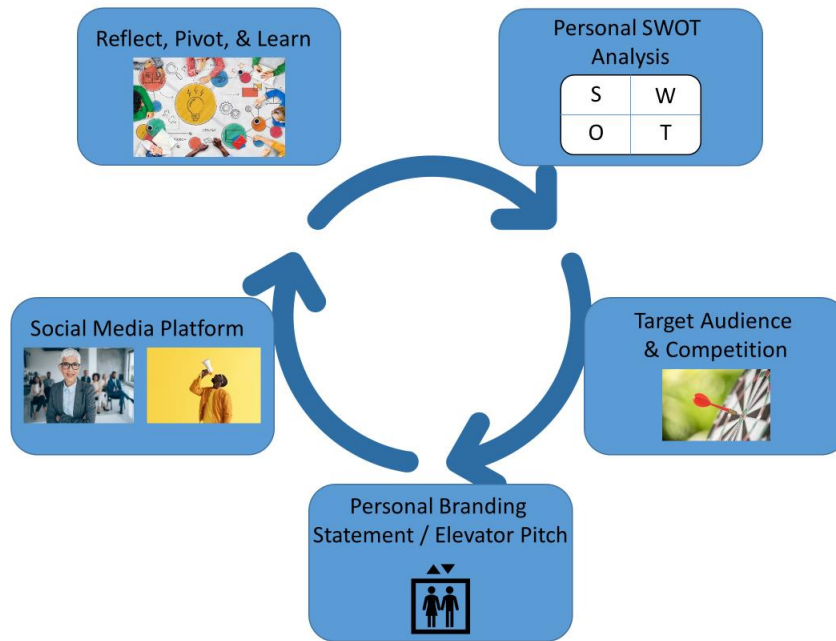
Step 2: Identify Target Audience & Review Competition (Peers)

Step 3: Create Personal Brand Statement or Elevator Pitch

Step 4: Select & Cultivate Ideal Social Media Platform

Step 5: Reflect, Pivot & Learn

Figure 2: Proposed Model for an Integrated Personal Brand Approach



(All images from the Microsoft Office Clip Art Library)

Students should begin by identifying their personal strengths, weaknesses, opportunities, and threats similar to a SWOT that is conducted for a company or an organization. The personal SWOT analysis sets the stage for the steps that follow and is particularly helpful in the creation of the personal brand statement or elevator pitch.

Once key strengths, weaknesses opportunities and threats have been ascertained, students should consider their ideal or desired target audience. It is also important to understand how one stacks up against the competition, or other young marketing professionals, i.e., peers.

Next, the student should carefully consider how to best represent their authentic self in the creation of personal brand statement or elevator pitch. In the classes I teach, the authentic self is presented as a mix of professional yet personable style and is viewed as more sincere and honest. A personal brand statement is typically two sentences or less while an ideal elevator pitch is thirty seconds, the amount of time one would have to introduce themselves and spark interest while on an elevator. The goal is to succinctly capture what it is that makes the student stand out from their peers.

A personal brand begins to take shape with the selection of the ideal social media platform for the individual. It is not a one and done process. A successful brand is dependent upon development and growth of the social media platform again while incorporating one's authentic self.

The Integrated Personal Branding Approach is a continuous strategic process that involves careful reflection, pivoting and lifelong learning. Students can continue their learning process in a number of ways through workshops, online classes, and certifications.

Elements for a Personal Brand Assignment

A personal brand assignment was added as a key deliverable to the marketing capstone class in a Mid-Atlantic public university for spring 2024 with plans to continue the project in summer and fall 2024. The initial assignment was created after reviewing multiple resources tied to personal branding. Branding texts *On Brand* (Licht, 2023), *Leave Your Mark* (Licht, 2015) and *Selling and Sales Management: Developing Skills for Success* (Spiller, 2022) were utilized for potential elements to include in the assignment along with related syllabi materials from peers in the industry (Gary, 2023) (Spiller, 2018). An informal survey was also disseminated in class to seniors in the marketing capstone in Fall 2023 to collect insight on what they deemed valuable.

Based on this initial research, four key elements for a successful personal brand emerged. The four elements were staggered throughout the semester to allow time for review and feedback from the instructor.

- (1) Create/update an engaging and inviting LinkedIn profile with a quality profile photo, tagline to communicate the student's unique selling proposition, About Me introduction, highlight job, internship and volunteer experiences and highlight key projects in courses. For full points, a one-page written summary of how the student completed the assignment was required along with a link to their LinkedIn profile and a screenshot of their profile pic and tagline. Students were also given the opportunity to earn an extra point by connecting with the instructor.
- (2) Create a thirty second video introduction or elevator pitch. The video introduction was required to include the student's name, major, top accomplishment/skill that makes them unique or memorable and anything else that might catch the attention of a potential employer. Students were encouraged to share the video introduction on a social media platform of their choice.
- (3) Earn an industry certification tied to something of interest to the student. Successful completion of this requirement included a one-page overview of what they learned in the certification and a screenshot of the certification. A link to free certification options was provided that included HubSpot, LinkedIn and Great Learning. The certification was required to be four or more hours in length.
- (4) Prepare a presentation showcasing the student's personal branding experience to be shared with the class in the final week of the course. The final presentation requirements included screenshots of key elements of the LinkedIn Profile, a slide that opened the video introduction, and information on the certification they pursued as well as an explanation of whether or not they would recommend the certification to their peers.

Survey Findings & Discussion

At the end of spring 2024, marketing seniors in the course were required to complete a survey reflecting on their personal branding experience. A total of 57 seniors participated in the survey. The survey respondents were roughly split between male and female. In addition, survey respondents were representative of the campus in terms of race/ethnicity, mode of attendance and duration of their studies at the university.

Seniors were overwhelmingly positive regarding their experience in the project. Nearly 90-percent of the students stated that they enjoyed the project either a great deal or considerably with a majority of those choosing a great deal. None of the students selected slightly or not all, two options on the left of the scale.

Figure 3: How did you like the Personal Branding Project?

A GREAT DEAL	CONSIDERABLY	MODERATELY	SLIGHTLY	NOT AT ALL	TOTAL	WEIGHTED AVERAGE
61.40%	26.32%	12.28%	0.00%	0.00%	57	4.49
35	15	7	0	0		

More than 75-percent of seniors said that this project greatly or significantly improved their overall understanding of branding; the remaining 15-percent said the project either improved or slightly improved their understanding of branding. Seniors said the experience helped them understand that branding extends beyond companies and organizations and the importance of extending branding concepts on an individual level.

Figure 4: How did this project further your understanding of branding?

	GREATLY IMPROVED	SIGNIFICANTLY IMPROVED	IMPROVED	SLIGHTLY IMPROVED	NO EFFECT	TOTAL	WEIGHTED AVERAGE
How the project furthered your understanding of branding	40.35%	35.09%	17.54%	7.02%	0.00%	57	4.09
	23	20	10	4	0		

“For example, I learned that branding isn’t all about the image/logo (like my photoshoot) it’s also about who you are and what you stand for . . . your values, mission, ‘about me’, etc.” Another senior added, “It definitely helped with understanding different perspectives when it comes to branding and see that branding is not always just about business. Branding is very important for individuals and the ones that know how to market themselves the most are the ones that get the best opportunities.” In addition, students talked about the importance of being their “true self” and learning what it is that differentiates them from their peers.

The majority of seniors shared they received multiple big takeaways from the project. Nearly 40-percent of seniors specifically addressed the benefits of the LinkedIn component of the project and 30-percent directly addressed the benefits to earning a certification. There was some overlap between these two groups.

Figure 5: What was the biggest takeaway for you personally regarding the Personal Branding Project?

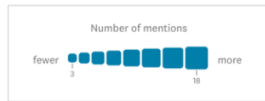


Figure 6: Selected written responses regarding Students Biggest Takeaway on the Personal Branding Project

Respondent	Response
10	<i>I absolutely LOVED getting inspiration, tips, and ideas from my fellow classmates. I almost feel like getting to see what my peers did was just as beneficial as the actual branding assignment.</i>
13	<i>My biggest takeaway from this project is that employers and potential connections definitely look at your LinkedIn profile when deciding whether to connect with you. I have had many people connect and even reach out to me after updating it. This project has resulted in two interviews for post grad jobs.</i>
21	<i>The biggest takeaway for me personally from the personal branding project was realizing the power of authenticity. I learned that being genuine and true to myself resonated more with others than trying to conform to an ideal image. This insight not only strengthened my personal brand but also boosted my confidence in showcasing my true self professionally.</i>
23	<i>The biggest takeaway I took from this project was that even after you created your personal brand, do not be afraid to continue to grow, improve and add more to your personal brand. Even after this course and project I plan to take more certifications and develop myself more to stand out in the marketing and graphic design space.</i>
35	<i>My biggest takeaway was that even if you don't have the work experience to make you stand out, there's something about you personally that will make you stand out. Every person has something going for them, you just have to figure out what yours is.</i>
52	<i>The biggest takeaway from the personal branding project for me is to stay active. Take pictures, videos, highlight my moments of professional experience and showcase them on social media, especially LinkedIn. My engagement rates on LinkedIn have increased drastically ever since the start of this project. This allows me to retain more connections with people and allows my profile to be seen more by potential employers.</i>

When asked to rate the level of importance of each personal branding component in the project on a 5-point scale ranging from not important at all to absolutely essential, nearly 75-percent of the seniors rated the LinkedIn Profile the highest or absolutely essential to the project. The remaining components were as follows in terms of absolutely essential: marketing certification, 42%; having an opportunity to see peers’ presentation, 26%; video introduction, 25%; and sharing the personal brand presentation 18%. The weighted average ranged from a 2.63 to a 3.68.

Figure 7: How would you rate the level of importance of each personal branding idea on a scale of "Not Important at All" to "Absolutely Essential."

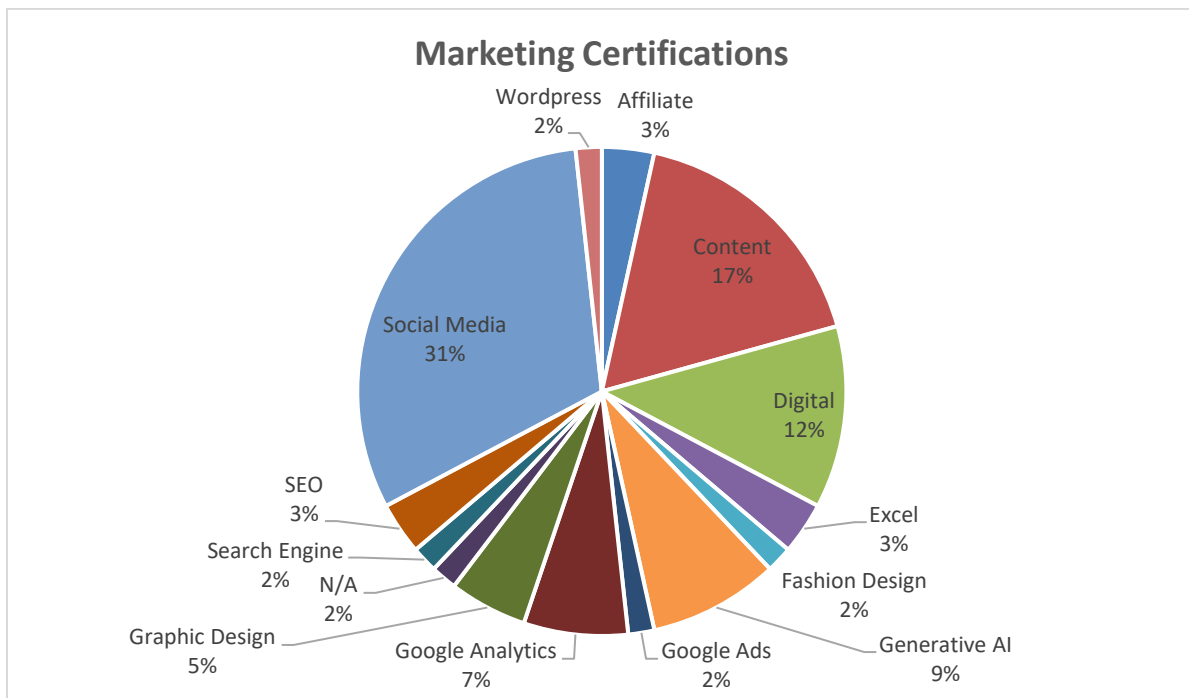
	NOT IMPORTANT AT ALL	OF LITTLE IMPORTANCE	OF AVERAGE IMPORTANCE	VERY IMPORTANT	ABSOLUTELY ESSENTIAL	TOTAL	WEIGHTED AVERAGE
<ul style="list-style-type: none"> ▼ LinkedIn Profile with a quality profile photo, tagline, about me introduction and highlight your key job, internship and volunteer experiences plus key projects in your courses 	0.00% 0	0.00% 0	5.26% 3	21.05% 12	73.68% 42	57	3.68
<ul style="list-style-type: none"> ▼ Video introduction or Elevator Pitch 	0.00% 0	8.77% 5	29.82% 17	36.84% 21	24.56% 14	57	2.77
<ul style="list-style-type: none"> ▼ Earning a marketing certification tied to something that interests you 	0.00% 0	3.51% 2	10.53% 6	43.86% 25	42.11% 24	57	3.25
<ul style="list-style-type: none"> ▼ Sharing your personal branding experience with the class through the end of term presentation 	1.75% 1	10.53% 6	28.07% 16	42.11% 24	17.54% 10	57	2.63
<ul style="list-style-type: none"> ▼ Having an opportunity to see what your peers gained from their personal branding experience through the end of term presentation 	1.75% 1	3.51% 2	28.07% 16	40.35% 23	26.32% 15	57	2.86

Discussion

Overall, seniors in the personal branding project shared that they enjoyed the learning opportunity and felt that it would have a positive effect on their future job search. Students said they were particularly excited about their new knowledge of LinkedIn and the benefits this social media platform provided them. One of the students in the study shared that the project resulted in increased connections on LinkedIn, which in turn led to two interviews for post grad jobs!

Students also expressed enthusiasm for the marketing certification they selected and felt it would provide them an advantage over their peers. Nearly sixty certifications were completed by students in the study with a few students opting to complete more than one certification. Social media certifications were the most popular selected by 31% of the seniors. Other popular certification choices were content (17%) and digital (12%). Seniors were encouraged to select a certification that interested them and that would benefit them following graduation.

Figure 8: Marketing Certifications Completed in the Personal Branding Project



Students added successful completion of their certification would provide them confidence in pursuing additional certifications in the future. Other students shared that they enjoyed seeing their peers present and considered this to very beneficial to the learning process.

Following completion of the project, seniors provided new insight on additional branding activities that could be added to the final project. A range of ideas were shared including:

- Complete a personal SWOT analysis.
- Add a cover letter, resume and/or a portfolio to the project.
- Set a goal of adding 20 or more connections on LinkedIn during the project.

- Develop several professional posts during the project to further develop your personal brand.
- Connect with a company of interest via LinkedIn.
- Select a company or job opportunity and apply to the opening.
- Have a real-life employer judge the personal branding projects and provide feedback.
- Provide a plan on how to grow your personal brand following the course.

Knowledge gained from the initial project and survey will benefit faculty considering adding a personal branding component to an existing course or adding a special topics course centered on personal branding. Continued feedback from students is advised to ensure the needs of students are met. It is recommended that students complete a personal SWOT analysis as they begin their major course of study so they can begin to discover what it is that makes them unique and apply basic marketing concepts to personal branding. Some students in the study had past experience setting up a LinkedIn profile when they entered the marketing program but had not updated their profile or used the platform on a consistent basis. Additional benefits could be accrued as students progress through the program. This could be achieved through follow-up and insight on current trends in LinkedIn profiles. Finally, more exploration of marketing certifications is needed to help students in their professional development journey prior to graduation.

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Student Perceptions of Perceived Enjoyment While Using Mobile Textbook Apps In Large Section Marketing Classes

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Abstract

Low motivation to properly study for exams has long been acknowledged as a factor for poor exam performance in college classes. College professors attempt to engage students using various methods of examination preparation including mobile apps. Research on mobile apps usage in classrooms suggests students' intention to use mobile apps is affected by the apps level of perceived enjoyment. Little is known about how students define or experience perceived enjoyment while using mobile apps. The purpose of this study is to examine students' perceptions about what makes a mobile textbook app enjoyable in a large section marketing classes at a R1 university in the United States. The research design uses both quantitative and qualitative methods to examine student attitudes and experiences surrounding enjoyment. The research plan is to create an experiment in the classroom where three different pedagogies are used. The researchers will administer a student survey to measure the relationship between pedagogy type and student perceptions of mobile app perceived enjoyment.

Keywords: Mobile Exam Preparation Apps, Exam Preparation, Test Preparation, Marketing Exams

Introduction

College students are ubiquitous users of mobile devices and apps, and students are starting to use mobile devices and apps as a medium to study with psychology and engineering students using digital flashcards to prepare for exams (Al-Jarf, 2021). Ninety percent of college students report connecting a laptop and a smartphone to campus Wi-Fi daily (Gierdowski, Brooks, & Galanek, 2020). Researchers in the UK report that 39% of young adults ages 18 to 30 are addicted to their smartphones (Sohn, Krasnoff, Rees, Kalk, & Carter, 2021). The latest smartphone research suggests 46% of Americans use mobile devices and apps for an average of four to five hours a day (Howarth, 2023). In 2022, Statista reported an 80% increase in mobile app downloads from 2016 resulting in 255 billion mobile apps downloads (Ceci, 2023). Educators acknowledge the empowerment that comes from using mobile phones and apps. Mobile phones and apps provide students with accessibility to communication, connection, family, peers, and faculty in a convenient environment (Tamiliarasi, 2023). With the ever-present mobile devices and apps, educators wonder if they can use mobile textbook apps to engage students with course content thereby increasing student learning and exam performance.

Research examining mobile apps and exam performance currently centers around English language proficiency apps and exams. Irudayasamy, Uba, & Hankins, (2021), published a study that examined 131 academic articles that analyzed how mobile app technology was used for

English language acquisition exams (TOEFL and IELTS). They found students benefited most when students used a smartphone device for Mobile Assisted Second Language Learning (MASLL), which helps students learn vocabulary, grammar, listening, and speaking fluency. Another important finding from their research was that the majority of mobile app pedagogy research was conducted outside of the classroom environment, meaning students engaged with the mobile apps on their own without educator modeling or engagement (2021).

Understanding the student motivations and behaviors as well as responding to market trends, the major textbook publishers have created complementary apps for their existing textbooks. Pearson developed two mobile apps that are free downloads with a textbook purchase called Revel and Pearson+. Currently these apps have over 100,000 downloads on Google Play (Pearson, 2023). Of the 40 marketing textbooks in the Pearson Catalogue, 30 of them are offered on the Pearson+ app (Go beyond the textbook with Pearson+, 2023).

McGraw Hill developed Sharpen which is free with purchase of a textbook but Sharpen+ is an upgraded service costing \$29.99 for a 3-month subscription. Since its launch, over 1 million activities have been completed on the app (Sharpen, 2023). It provides overview videos, chapter summaries, exam-prep quizzes, step-by-step practice problems, flashcards, and personalized recommendations for improvement. In addition to courses that complement the McGraw Hill textbooks, Sharpen has resources designed to complement any textbook, as well as select resources to complement OpenStax textbooks. The app is free for students to download and includes access to resources for over 120 titles and courses. If students wish to access premium content, including extra videos and quizzes, they can pay for the 3-month Sharpen+ subscription at a cost of \$29.99. The extensive resources available on Sharpen have made it a popular app that has seen rapid growth (Sharpen, 2023).

Cengage provides a free mobile app called CengageRead to students with the purchase of a textbook and they also have another mobile app called MindTap (Cengage, 2023). Additionally, students have third-party apps from popular student study sites like Cheeg, Quizlet, and WhatApp to help them learn college content. These apps provide several types of study activities including flash cards, quizzes, matching games, slide shows (Al-Jarf, 2021).

Pedagogy is changing because of student demand and behaviors to use mobile devices and because traditional textbook companies and third-party app providers are providing mobile apps to complement their textbooks. Educators need to understand student motivations and expectations, and they need to learn the best practices for implementing mobile app pedagogy in the classroom. Making matters more complicated, recent research suggests the most important key factor for using a mobile app for student usage is personal enjoyment of the app (Al-Bashayreh, Almajali, Altamimi, Masa'deh, & Al-Okaily, 2022). This research defines personal enjoyment as enjoyable, pleasant, and fun. Not only do educators need to master the technology of the mobile app, but also they must use pedagogy with the apps that students perceive as enjoyable.

Purpose of the Research and Research Questions

For our research, we refer to students using a mobile device like a smartphone or tablet with software produced by a major textbook publisher using the words “mobile app.” With ubiquitous

use of mobile apps, we argue that college educators must incorporate aspects of mobile learning in their pedagogy to connect and educate students. Additionally, use of mobile apps in the classroom must include personal enjoyment for students to adopt and use the mobile app. Currently, educators are not familiar with the best pedagogy practices to incorporate mobile apps in their college classrooms in a way that makes using the app enjoyable. The research objective is to fill this gap by exploring student perceptions surrounding mobile apps using the following research questions: (1) What pedagogy practices can professors implement that make mobile apps enjoyable for students? (2) What features of the mobile textbook app are perceived as enjoyable for college students? (3) If students use the mobile app, what is the impact of mobile app use on student exam scores?

Literature Review

Theoretical Framework

Learning phenomena can be explained by Social Learning Theory (Bandura & McClelland, 1977), Cognitive Theory of Multimedia (Moreno & Mayer, 1999), and E-Learning Theory (Mayer, 2017). Based on these theories, we understand that students need to model learning practices that are using technology designed to focus on intrinsic material which now produces new learning opportunities in the college lecture hall or online environment. Given the impact of college exam scores on students' futures, college ranking, funding opportunities, and professor performance, the pressure to improve exam preparation continues to increase. Thus, we are exploring the connection between students' use of mobile apps and exams.

Theories exist that discuss the process of learning in a modern college class. The classic, dominant learning theory that is highly relevant today for college professors is Bandura and McClelland's Social Learning Theory (1977). We build on Social Learning Theory (Bandura & McClelland, 1977) with Cognitive Theory of Multimedia (Moreno & Mayer, 1999), and E-Learning Theory (Mayer, 2017). Social Learning Theory suggests students learn by observing and imitating others and that on later occasions the learners retrieve this information to serve as a guide for future behavior and action. For the Social Learning Theory to exist the learner must work actively to pay attention, retain information, reproduce, and motivate themselves to learn (Bandura & McClelland, 1977).

Advancing the idea that learners must actively engage in learning, Mayer and Moreno's theory of Cognitive Theory of Multimedia Learning found that when students actively use technology as the model of learning, the students' brains suffer an overload of information. Their model divided the information into three types of information: intrinsic, extraneous, and germane (1999). Their findings suggest that when modeling learning or using technology to teach, the information provided needs to focus on intrinsic load information which is the complex or difficult to understand information while optimizing the germane load and eliminating the extraneous load information (1999). Building on these two theoretical frameworks, is Mayer and Moreno's Model of E-learning Theory (Mayer, 2017). Understanding how the brain works from social modeling and that the brain has a limited capacity to process and store information, the Model of E-learning Theory advocates using 11 instructional design principles to effectively create a model for students to learn through technology (Mayer, 2017).

Academics are starting to examine how mobile apps impact student learning, but the research is

still in its beginning phases. Research from Mafunda and Swart (2020) examined how 65 first-year software engineering students used MindTap to learn basic concepts in a Software Applications 1 college course. The researchers compared exam scores from 2018 when students did not have access to MindTap and from 2019 when students were given free access to MindTap. Exam performance was similar for both student groups and no statistically significant relationship could be observed between students who used the MindTap app and those who did not (Mafunda & Swart, 2020). The researchers suggested that if the entire department were promoting and teaching using the MindTab app the results of the study may have been different (2020).

Boozer and Simon (2020) examined if MindTap has a statistically positive association on grades in a core finance business class. They measured independent variables homework (HW), quizzes, and exams with simple regression, and found conflicting results. Each independent variable produced a stronger coefficient with higher beta values in classes where MindTap was used. However, the association was weak when they ran multivariate analysis. The overall grades for the class using MindTap (80.49) varied little when compared to the class who did not use MindTap (79.42) (Boozer & Simon, 2020). Both research examples show impact on the exam scores. Little is known about how frequently the students used the mobile apps; whether the mobile app was modeled in the classroom by the professor; or how students perceived features of the mobile app.

Feraco, Casali, Tortora, Bon, Accarrino, and Meneghetti (2020) examined the impact of a mobile technology system in a large section psychology class. They built on the testing effect from Roediger and Karpicke that taking practice quizzes promotes learning and long-term retention better than other strategies like re-reading. Regression showed that students who answered quiz questions experienced a higher exam score than students who did not answer quizzes on their mobile devices (2020).

To explore the impact of these learning theories on mobile apps, Al-Bashayreh, Almajali, Altamimi, Masa'deh, and Al-Okaily (2022) administered a 34-item survey to 415 Jordanian students in 2020-2021. They tested students' intentions to use mobile apps based on the perceived convenience, self-efficacy, compatibility, enjoyment, usefulness, and ease of use of the mobile app. Their research found that in the post Covid-era the most important factor for student intention to use a mobile app was perceived enjoyment, which they defined as enjoyable, pleasant, and fun (2022).

The existing research on mobile app usage in the college classroom is inconsistent and more research needs to be conducted. Our research aims to add fill the gap of what is the best pedagogy to use mobile apps and how educators should best promote mobile apps to students to create perceived enjoyable experiences, which may improve their learning and exam scores.

Methodology

To evaluate our research questions, we plan to conduct a study in the fall of 2024 in a large-scale Principles of Marketing class at a Carnegie classified R1 Doctoral University (Carnegie Classification, 2024). We chose this large section marketing class because of the sample size available to the researchers and consistent quality of teaching provided by the professor who has

been teaching this course for over ten years. Additionally, the textbook publisher, McGraw-Hill may offer a discounted code removing a barrier for student adoption of the mobile app.

The Study: Measuring Student Perspectives of What Makes a Mobile App Enjoyable

We define an enjoyable experience as something that has positive emotions, student engagement, fulfills a need, provides novelty, provides variety, connects others, and provides a sense of achievement. The professor will create three different pedagogy activities where students use their mobile apps to compete and engage with each other. At the end of the fall semester, we plan to distribute a Canvas survey to measure student attitudes about perceived enjoyment using the mobile apps for each distinct style of pedagogy. Finally, we will evaluate if student use of mobile apps impacted student exam scores.

Conclusion

The purpose of the research is to understand what pedagogy college educators should implement as they begin to use mobile textbook apps in their classrooms for exam preparation. A college professor in a large Principle of Marketing class at an R1 university will attempt three different pedagogies while using mobile apps. The professor will implement novelty, gamification, and active learning pedagogy during the semester using the mobile app. A student survey will be administered to measure the level of enjoyment of using the mobile app with the three distinct types of pedagogy. Taking the results from the survey, the researchers will discuss and recommend best practices for teaching with mobile apps in the college classroom.

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Adding Relevance with Experiential Learning: Engaging Alumni in the Development and Implementation of Selling Role Plays

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Extended Abstract

The purpose of this work is to determine the effectiveness of utilizing recent alumni working in sales positions, and their current companies, to help develop and write live case scenarios to be used in an introductory undergraduate selling course. In addition to developing the case, the alumni will also *role play* as customers with current class members so that students can gain experience utilizing sales techniques being taught in class by instructors. We expect several positive outcomes for this type of activity including positive student outcomes (e.g., increased confidence in skills) and university outcomes (e.g., increased alumni engagement). Qualitative research will be conducted to determine effectiveness of this activity.

Key Words: *selling, sales cases, alumni, role play, sales training*

Introduction

Sales education continues to evolve as an integral part of undergraduate marketing programs. To a certain extent, this is the result of an increasing demand for sales professionals across multiple industries, the trend of a high-volume of undergraduate marketing graduates starting careers in jobs focused on sales, and student and industry expectations for relevant learning experiences that foster experiential learning. For instance, some organizations report that up to 50% of business majors will hold their first job in sales (Sales Education Foundation, 2023). In addition, the U.S. Bureau of Labor Statistics (2023) reported more than 13 million sales-related jobs in the United States. Finally, the Advance Collegiate Schools of Business (AACSB) emphasizes the use of experiential learning to challenge students with a relevant, impactful, and up-to-date curriculum (AACSB, 2024). Without this type of learning, students tend to think that courses are irrelevant and do not provide real-world skills (AACSB, 2024). Given this context, universities recognize a pressing need to better develop professional selling skills among undergraduate students. One way universities achieve this goal is through formal sales programs – there are 176 universities in North America that provide formal programs (Sales Education Foundation, 2023). Another way universities without a formal program achieve this goal is to develop a course that develops students' selling skills. The current work applies to both options.

Previous marketing education research has established the use of role play activities as an effective method to develop selling skills among students (e.g., Mani et al., 2016, Widmier et al., 2007). Accordingly, introductory professional selling courses often incorporate in-class role plays (Magnotta, Peev, and Steffes, 2020). Role plays are not far removed from activities that can be found in a corporate sales training class and are imperative because of their primary emphasis on

developing effective selling techniques. Nonetheless, these types of exercises can lack the realism of an actual selling situation (Magnotta et al., 2020), which is counter to AACSB's standard of relevant and up-to-date experiential learning.

Research demonstrates that one way to increase the realism of in-class selling role plays is to employ outsiders such as industry professionals (Saavedra Torres and Rawal, 2021). In line with this work, we contend that there is great value in engaging university alumni, ideally alumni who took the same type of selling course, as outsiders to not only participate in the role play but also help develop role play cases. There are several reasons alumni should be engaged. For instance, alumni often serve as class speakers and share their professional selling experiences. In addition, alumni provide students career advice. Alumni could also recruit students to join their companies. Taken together, we assert that engaging alumni in the development and implementation of selling role plays could boost the realism and relevancy of skills developed in an introductory selling course. As a result, we explore how these types of role play activities can benefit the student experience, foster learning, and enhance skill development (Elam and Spotts, 2004; Magnotta et al., 2020). Formally, we seek to answer the following research questions. How do alumni-developed and implemented role-plays influence student selling skills development and overall student success? How do the university and alumni benefit from this activity?

Alumni developed and implemented role play activities could potentially better engage alumni in the classroom with students. Alumni could now actively participate with current students in role playing scenarios based on their actual experiences selling in the marketplace. As a result, these cases become even more meaningful if they can engage the alumni within the curriculum in a low time commitment—yet rewarding classroom assignment (Singer and Hughey, 2002). This research will specifically explore several types of benefits that could result from engaging alumni in alumni-developed and implemented role-plays including for example: up-to-date cases each semester; become better acquainted with sales management at various organizations where our alumni are employed; strengthen bonds with these companies so they continue to hire our students; and encourage philanthropic participation by engaging alumni in classroom activities.

Background

One of the main reasons for utilizing real world sales case scenarios is that students report projects that involve issues faced by real world companies improve their engagement and understanding of key concepts (Bergman and Carlson, 2020). Also, learning outcomes suggest that students and alumni who share an alma mater have much in common, thus helping to establish trusting relationships more quickly which are needed for effective mentoring (Larsson, Marshall, & Ritchie, 2022). This is an early-stage project that involves not only the development the role play cases, but also research into their effectiveness with students, alumni, and the university. Since the initial cases will be developed and completed during the summer of 2024, we expect to utilize these first cases, along with alumni role play, during the early fall Professional Selling classes in late August and early September. Consequently, we will be able to share early qualitative research results of this project during the Atlantic Marketing Association Conference in late September. To date, completed and future steps of this project include the following.

1. *Contacting Alumni to Participate in Live Case Creation*

Alumni were contacted in April to determine if there would be an interest in participating in the sales case pilot program for the Professional Selling class. So far, our alumni at several companies (e.g., Paycom, Spotify, Box, Alpha Sights) have shown an interest in being part of the program. We began working with several of these companies starting in June. Our expectation is to work with three companies in the summer and develop cases for the next academic year.

2. *Case Study Development*

The case studies are being created to help develop several types of essential selling skills such as: building rapport, seeking client information with questions, testing solutions, addressing concerns, and closing techniques. Our expectation is to develop short cases with companies and people that are based on actual selling experiences. Information to be provided in each case would be basic facts about the company, what was found out about the company with a quick scan of secondary sources, the expectation for the sales call, and the prospect background. We also envision developing several selling scenarios allowing students to understand the different types of sales situations that professionals encounter: first meeting to gather information; second meeting for a formal sales presentation; meeting with one prospect at a time and with two or more prospects at a time; and follow up meetings.

3. *Alumni Role Play Participation*

Once these case scenarios are developed and approved by the alumni and their respective companies, the goal is to have the alumni creator *role play* as the client with students in the Professional Selling class. The expectation is that students and the class instructor would review and discuss the case during one class period. The next class period would include the alumnus who would *role play* with an individual student or student team. There is evidence to suggest that students' perceived improvement in understanding how coursework applies in practice can be attributed to hearing the information directly from alumni (Larsson et al., 2021).

Research and Assessment

This work will be assessed in two introductory selling courses in the fall of 2024 and in one in the spring of 2025. Because each class will have approximately 16 enrolled students, qualitative interviews will be used for assessment. We expect to assess the effectiveness by exploring the following areas using in-depth interviews of students, alumni, and the management of the company where our alumni are employed:

1. Is there an improvement in student engagement?
2. How supportive are alumni and the management of their companies in active case development and class participation, and do they find fulfillment in the role?
3. Are companies more interested in recruiting students after participating in the project?
4. Does alumni participation lead to increased university engagement?

Relevance of Study to Marketing Educators, Researchers, and Practitioners

The use of current case studies developed by *marketing educators* working closely with their former students, now alumni employed full-time in sales positions, offers significant relevance to marketing educators. This process will allow educators to develop a fresh flow of new and more realistic sales cases on a timely basis reducing reliance on older, already published cases that can be hard to locate. Also, performance feedback from an alumni peer a year or two older than current students can be more credible than from authoritative faculty members thus allowing for more meaningful feedback to students. Additionally, having faculty engaging with former students is healthy in building longer-term relationships that can lead to other activities with alumni who want to stay involved with sales education at their alma mater.

There is also relevance for *research* with this work to determine if engaging sales alumni in current student sales training is a meaningful pedagogical method of instruction. This study can become a relevant source for future researchers studying in the areas of experiential learning, the use of outsiders to help develop in-class sales skills, and how universities benefit from making more effective use of their alumni in the classroom.

Of particular interest, during our initial conversations with alumni while developing cases for this study, it was discovered that participation in this process helped them, as *practitioners*, meet an education merit requirement necessary for a promotion to their next level. Consequently, the case development and role play exercise is rewarded by many companies during employee evaluations. Also, many sales employees receive a bonus for recommending recent college graduates for entry sales positions. The role play experience allows alumni to see talented students who they can recommend for employment at their companies.

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Track: Marketing Education/Experiential Learning

ID#: 1781

Country Image in the Age of AI and Recruitment of International Students

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Extended Abstract

Studies abroad programs are popular avenues through which universities engage their students in cross-cultural experiences. Still, many students elect to not participate. Those students who elect to study abroad have varied preferences with regard to the countries where they are willing or excited to study. Past research suggests that a student's academic motivation, social ties, ability to earn academic credits, learning about career opportunities while traveling and country image of the study abroad location affect a student's attitude toward a study abroad opportunity (Nyaupane et al 2011; Weirs-Jenssen 2003; Ghazarian 2016). In this research we aim to enhance these findings by incorporating our current knowledge of generative Artificial Intelligence (AI) technologies, such as ChatGPT, from the traveling planning and decision making literature streams.

Considering the increasing popularity, accessibility and usefulness of generative AI chatbots such as ChatGPT and Google Gemini, it can be claimed that such chatbots might eventually take the place of traditional search engines (Heaven 2022). Past social science research has well-documented that the information processed by our minds significantly impacts our decisions and behaviors. Therefore, it is likely that the generative AI chatbots can also affect the decisions of individuals, such as electing to study abroad. Based on the previous discussion, we aim to explore the impact of generative AI technologies on students' participation in the study abroad programs in the new age of travel planning and decision making with the assistance of AI chatbots.

AI has been reshaping the competitive landscape across all industries, including travel and tourism. Julia Simpson, President and CEO of the World Travel and Tourism Council, explicitly stressed that the comprehension of the advantages and threats of this innovative technology by tourism and hospitality leaders is essential (WTTC 2024). According to World Economic Forum, the AI is redefining how we travel in multiple ways: from the AI technologies included in facial recognition, robots and biometric systems streamlining security, check-ins and cleaning services at airports and hotels; to AI algorithm used in consumer behavior analyses to determine personalized recommendation for travel and to predict future travel behavior or travelers' demand. AI travel assistants have been launched by the tourism industry's largest brands, such as Trip.com Group's TripGenie, where one can obtain personalized recommendations for a three-day trip to Switzerland in a matter of minutes instead of elaborate hours or even days of manual

searching and planning the trip, proving especially useful with multiple destinations (Sun 2023). Similarly, IHG teamed up with Google Drive to build a generative AI empowered travel planner that the company plans to unveil in the second half of 2024 (Mateer 2024). There is even a free-standing AI travel planner named Layla at your service 24/7 available online (Ask Layla 2024). Many power players in the hotel and travel industry follow suit. Homes & Villas by Marriott Bonvoy, for example, introduced their new AI-powered search tool, “the first of its kind for private home rental matching”, on June 3, 2024 to “find your vacation home of your dreams in vivid detail”, claiming to take the travel planning to next level and finding your dream getaway simply by entering the important keywords into the search bar (Homes & Villas by Marriott BonVoy 2024). A recent study by Wong, Lian and Sun (2023) presented various situations regarding how generative AI technologies, particularly ChatGPT, can influence travelers’ decision making process before, during and after the trip phases. Authors concluded that travelers may adopt an entirely new way of traveling mediated or even dominated by AI in the future as these travelers will receive assistance based on their character, personal selections and previous experience. Just like how an AI chatbot may influence a destination choice of a traveler, it may also affect a country selection of a student for a study-abroad program. More importantly, such AI technologies can even influence a student's decision to participate in a study-abroad program. Therefore, the present proposed study explores the potential role and impact of AI chatbots in the decision making behavior of students’ regarding study abroad-programs.

Our research suggests that in addition to the more widely assessed effects of the factors related to the student’s internal and external disposition (Nyaupane et al 2011), factors related to the study abroad institution and student’s home university (Wiers-Jessen 2003) and factors associated with the study destination’s macro country image (Ghazarian 2016) on the study abroad attitude formation, the new AI chatbots need to be also considered when students make their decisions to travel for study purposes. The factors related to this new technology can influence students’ willingness to participate in study abroad programs or recommend the programs to their friends. Practical applications of our study’s findings will suggest strong opportunities for collaboration between government, business and university policy makers in order to improve the attractiveness of study abroad programs among students at partner foreign universities.

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Track: Marketing Education/Experiential Learning
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Student Higher Education Experience Journey from High School to Career Transition: A Holistic Approach

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Extended Abstract

Faced with increased competitive pressures, many colleges and universities have recognized the importance of effective marketing in student recruitment. This study goes beyond recruitment to holistically understand the higher education journey from high school to career. The paper proposes a framework that covers all stages, from high school students' first learning about colleges and universities to the factors influencing their selection decisions and their learning experiences related to meeting academic and career expectations.

The specific research objectives are to: 1) determine which sources of information high school students use to first learn about a university and gather additional information, 2) identify who influences high school students as they decide whether to attend a university, 3) examine the selection criteria that are important for high school students when assessing and selecting a university, 4) evaluate students' satisfaction with their educational experience in meeting their expectations at the university, and 5) determine students' likelihood of recommending the university to friends and family members using Net Promoter Score (NPS), as well as identify the factors that serve as predictors influencing the likelihood of recommending a university to high school students.

Using a sample of private university undergraduate students, we explore the factors that drive the overall higher education student experience. Our model suggests that several factors influence the choice of higher education institutions, including information sources (such as family members and alumni), additional sources of information (various social media), decision influencers (parents, guardians, and family members), selection criteria (financial aid/scholarships, degree programs, affordability, campus culture, and job opportunities), and student satisfaction, along with predictors of recommending the university to high school students (satisfaction with the educational experience, a favorable change in impression, likelihood of attending again, respect for cultural diversity, and emotional bond). Consistent with our model, the results indicate that several divergent factors drive the likelihood of attending a university, student satisfaction, and the Net Promoter Score (NPS). The findings from this research inform college administrators as they seek to incorporate comprehensive marketing strategies to attract and retain students.

Keywords: Higher education; Marketing; Net promoter score; Student recruitment

Track: Marketing Education/Experiential Learning

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Building Community through Service Learning: Textual Analysis of Students' Blogs in PR Education BEST PAPER IN TRACK

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Abstract

Service learning is an experiential-based pedagogy that allows students to enhance their disciplinary-based learning with significant community engagement. In the public relations field, this approach can involve applying marketing concepts and skills to the promotion of community organizations. This research examines the results of semester-long assignments during two pre-pandemic academic years in which students volunteered weekly for nonprofit, religious, or community organizations and then created blogs promoting these organizations based on their individual experiences. The research examines a sampling of twenty-five publicly available blogs first created in introductory public relations classes taught by the researcher at a liberal arts college in both the both the fall and spring of 2017-2018 and 2018-2019 academic years. Utilizing both quantitative and qualitative textual analysis of the students' final blog posts for the semester, this research found that students not only built skills and applied insights from their marketing courses, but that many times they became a part of a community, gaining personal growth and insights from the experience. The qualitative analysis identified the themes of community and connections, empathy and new cultural awareness, and digital storytelling and reflection. Using web scraping tools, a quantitative examination of the frequency of words in these blog entries further supports these findings. In fact, "community" was one of the most frequently used words in these final blog posts. These findings suggest the importance of reengaging service learning in post-pandemic public relations education as an avenue for students' self-expression, connections with community, and personal growth.

Keywords: Service Learning, Public Relations Education, Student Blogs, Community Development

Relevance to Marketing Educators, Researchers and/or Practitioners: Evidence from the blogs of public relations students that volunteered with nonprofits and service organizations during introductory public relations courses suggests that service-learning experiences not only allow the student to apply skills and principles in a new setting but engender new personal insights based on an empathetic connection with a new community.

INTRODUCTION

The Chronicle of Higher Education reports that three years after the peak on the pandemic, colleges still see a lack of student engagement in everything from student clubs and organizations to participation in the classroom (Gretzinger and Hicks, 2024; Roberts-Grmelar, 2023). Over the last dozen years, student anxiety has continued to rise, and academic distress remains higher than in pre-pandemic times (Marijolic, 2023). In this context, professors

describe students as being isolated and disengaged (McMurtrie, 2022). During the pandemic, professors were limited in the ways they could creatively engage students, and some have been slow to return to these creative approaches. In public relations (PR) education, service learning offers a possible way to reengage students that might otherwise remain isolated and disconnected. Service learning may offer an approach that connects students with a community and provides them with new purpose and identity.

Literature Review

Rooted in the educational philosophy of John Dewey, and based in student learning activities that address community needs, service-learning is an important and evolving form of pedagogy in higher education (Flecky, 2011). Chambers & Lavery (2017) define service-learning as a teaching methodology that uses community engagement as a means of assisting students in mastering disciplinary-based content. Flecky (2011) describes the hyphen between the two terms as signifying the purposeful balance between service and learning in this approach to teaching. As an experiential-based pedagogy, it involves explicit learning goals, engagement with a specific community, response to genuine human need, and systematic reflection on the part of the student, and it has been shown to foster both professional and community connections (Chambers & Lavery, 2017). Service-learning is now a widely accepted teaching technique used around the world (Duffett, et al., 2023; Mungaray-Lagarda, et al., 2022) and has been employed in interdisciplinary settings and in conjunction with international travel (Watson et al., 2024). It offers students the opportunity to apply classroom principles in real-world settings, to engage in teamwork, to interact with clients, and to enhance their sense of civic responsibility (Witmer et al. 2009). It has been applied to a wide range of fields including the study of health care, human services, education, computer science, and business (Cantu et al., 2024; Redding & McDaniel, 2023; Dempster et al., 2023; Castro et al., 2024).

In business courses, service-learning has been a tool to help students translate classroom concepts into practice in many areas including finance, management, accounting, and the focus of this paper, marketing (Dick et al., 2021). It has been effectively used in many different type of marketing classes. For example, Neese, Field, & Viosca (2013) demonstrate that service-learning approaches can assist marketing research students in using new marketing concepts and skills for the promotion and support of community organization. Hain & Whiting (2024) describe the application of community engagement projects within courses focused on digital and social media marketing. Szendrey (2022) describes a collaborative approach that allows marketing research students to engage in the type of service-learning usually reserved for accounting students. Fraustino, Pressgrove, & Colistra (2019) argue that capstone courses in marketing make ideal environments for implementing larger service-learning projects.

In the public relations field, a service-learning approach involves applying marketing concepts and skills to the promotion of community organizations. Rogers and Andrews (2016) describe how for more than 25 years students in university PR campaign courses have worked with community partners as service learners. A number of authors argue that public relations classes are a natural fit for the service-learning approach (Harrison & Bak, 2017; Patterson, 2004; Witmer et al. 2008). McCollough (2020) suggests that in PR courses, an experiential-based pedagogy engages the students in community interactions, adding relevance to their learning. In fact, service-learning assignments in public relations courses have been shown to contribute to

the development of a civic mindset that can influence students even years after graduation (McCollough, 2020). Gilles et al. (2019). They maintain that service-learning can be a key to bringing underexplored topics, like new and more relevant perspectives on fundraising, into public relations coursework. Rogers and Andrews (2015) use focus-group and survey research to examine community partners' responses to the service-learning work of public relations campaign classes, emphasizing the importance that nonprofits communicate their needs to students.

The use of surveys and focus groups with students and community partners has been central to much of the past investigation of the impact of service-learning on public relations education. This paper contributes to the growing body of research related to service-learning in PR coursework, but it is somewhat unique in the type of textual analysis used to assess the impact of the process on students. Like McCollough (2020), this research identifies themes from public relations students' responses, but unlike that study and many others, this research offers a quantitative textual analysis component and uses student blog sites as the data source.

Methodology

This research examines the results of semester-long assignments during two pre-pandemic academic years in which students volunteered weekly for community organizations and created individual blogs based on their experiences. The students' volunteer work was a service-learning component of courses focused on public relations writing that were offered at the researcher's liberal arts college in both the fall and spring of the 2017-2018 and 2018-2019 academic years. Over the semester, the students blogged about their volunteer experiences, helping to promote the organizations or causes that they had selected. The students shaped their blogs for a particular audience (persons served by the nonprofit, potential donors to the cause, volunteers for the organization, etc.) and determined how to make clear that the blog was the student's creation and distinct from the organization's own communication. They received buy-in from the service organization and posted at least ten times to their publicly available blogs over the course of the semester, using social media and other tools to build an audience and promote their websites. Organizations that the students worked with included Habitat for Humanity, the Boys and Girls Club, a local food pantry, a community garden organization, a local chapter of the National Alliance on Mental Illness, a nursing home, the Shriners, an animal rescue, Best Buddies, the Challenged Athletes Foundation, a recycling organization, Appalachian Outreach, Young Life, a performing arts center, and other nonprofits and community service groups.

This research study examines a sampling from the eighty-nine final blog posts created as part of this service-learning assignment for public relations writing courses taught by the researcher during four pre-pandemic semesters. A sample of twenty-five blogs was selected (N=25) by first eliminating all the websites that were no longer maintained or publicly available, as well as those websites for which the students had not completed the ten blog-post course requirement. Then twenty-five of the students' websites were randomly selected from the remaining blogs. Each student's final (tenth) post written for the blog during the semester of each course was investigated through both qualitative and quantitative methodologies.

In terms of qualitative textual analysis, each final blog post in the sample was carefully read and analyzed by the researcher. Using the grounded theory methodology described by Glasser and

Strauss (1967), the researcher categorized and coded themes that emerged from an analysis of the students' blogs. These themes then were considered in light of their implications for service learning in public relations education.

A quantitative textual analysis of these twenty-five blog sites was also conducted. The focus of this analysis was the frequency of the most commonly used words in blog. These words were the ones used by the students to describe their semester-long service-learning experiences in the final blog posts. Because of visual images, advertising, and other extraneous aspects of the blog sites (most of which were free to use and supported through advertising), quantitatively analyzing the students' final blog posts required specialized tools for the web scraping of data. Each website was opened in Google Chrome, and using a Chrome extension known as SelectorGadget, the researcher was able to isolate the specific text to be analyzed, in this case the narrative forming the basis of the final blog entry of the student's semester. SelectorGadget is an open source CSS selector, which isolates specific html elements for further analysis, excluding other aspects of the website. CSS (Cascading Style Sheets) is the computer language for laying out and structuring web pages (Duckett, 2011). With the web address and the CSS selector code generated through SelectorGadget for each site, R was used to extract the appropriate text from each student's website, conduct a word count of each word in these blog posts, exclude pronouns, articles and other commonly used words with little influence on the unique meaning of the blog posts, identify the top twenty words used in the blogs, and generate a word cloud for this service-learning assignment. The quantitative analysis in R offered a means to complement and support the qualitative findings.

Findings

Utilizing both qualitative and quantitative textual analysis of the students' final blog posts for the semester, this research found that students not only built skills and applied insights from their public relations courses, but that many times their service-learning experiences allowed them to become a part of a community, gaining personal growth, empathy, and insights from this new self-identification. Using a grounded theory approach, qualitative analysis identified three central themes from the study of a selected sample of the students' final blog posts. The first was the development of a sense of connection and membership in a community. The second theme was the growth of empathy and new cultural awareness. The third major theme related to the students' perceived importance of digital storytelling and self-reflection.

The students' growing affiliation with the group or organization with which they had chosen to volunteer for the semester was very evident in their final blog posts. Discussion of membership in a community and a sense of connection with others occurred again and again in the students' writing, forming a central theme of the blogs. One student spent their semester working with the Highlander Research and Education Center, an Appalachian program that works as a catalyst for grassroots organizing, promoting justice, equality, and sustainability. The student's documented his own shifting perspectives and growing sense of connection, and in his final blog he wrote, "There is one thing that I learned the most of all, and it was that Highlander is a place where ideas of all kinds come together. There were older people and kids, there was white and black, there was gay and straight, all working together to help their communities to become better." Another student volunteered with Habitat for Humanity, an organization building housing for those without homes. He wrote, "Habitat is a family, a community, at least that is how they have

been treating me and I am extremely appreciative to everyone that works there. Surely a lot of people will have smiles on their faces this Christmas based on what we have done.” Another student blogged, “I will never forget my experience with the Shriners. I have made lifelong friends and will never forget them and the children. I will continue to keep in touch with the children and the Shriners and the ones I know back in my hometown.” A volunteer with the Boys and Girls Club summed up her service-learning experience in a way similar to many of the students’ blogs. She wrote, “The BGC, the workers were very kind, patient, and they absolutely love those kids. I had an incredible time playing games and simply enjoying the kids smiling and laughing. I am part of a new community.”

A second theme that emerged from these blogs about the students’ service-learning opportunities was that of empathy and new cultural awareness. The students encounter people and circumstances that gave them new perspectives on groups of individuals that they might have been aware of but had never before understood. The students worked with organizations like Best Buddies, International, a group dedicated to building one-to-one friendships and opportunities for individuals with intellectual and developmental disabilities. They gained new perceptions of others through their interactions. After working with an organization, the Challenged Athletes Foundation, for the semester, one student wrote on her blog, “An amputation can seem like the end of the world or like you have to start over all anew, but that is not necessarily the case. It can be just one of the many experiences that you have in life that makes you unique.” Another student that volunteered for Young Life, a nondenominational program for middle and high school students with a strong evangelical mission. She wrote, “The best part about this ministry is the fact that I have been impacted more than most of these students have. I have been forced out of my comfort zone past my own understanding of the gospel and put in a position to meet these students where they are.”

A third theme that emerged from the blog entries was the importance that students found in digital storytelling and self-reflection. Students found a benefit in recording and reflecting on their service-learning experiences and described their blogs much like a personal journal. A Boys and Girls Club volunteer wrote, “Blogging specifically about a volunteer experience has been particularly challenging, because it is a very personal venture. But I have enjoyed this: my words, out for all to see...I think that is the true purpose of writing and being read, you discover so much about yourself. So thank you for listening to my thoughts about kids, life, and volunteering.” Another student worked for the semester with a local chapter of NAMI, the National Alliance on Mental Illness. She wrote in her final blog post, “After this semester working with this organization, I want to continue to work with my NAMI community and get all the information I can, maybe even some help with organizing a fundraiser. I will also be sharing my story on You’re Not Alone and connect with people on OK2TALK.” Sharing one’s story can be an important part of students own journey, and service-learning can be a catalyst to digital storytelling and self-reflection.

The insights from the quantitative investigation of the frequency of words used in these twenty-five service-learning blog posts further support and complement the qualitative findings. After using a web scraping tool and eliminating frequently used words like articles and pronouns, the analysis found terms like “life”, “love”, “help” and “kids” were among the top twenty most frequently used words (see Chart 1). The most frequently used word, however, was

“community”, undergirding the theme of connections and community as an outcome of this service-learning assignment. Although some uses of the word “community” in the blogs might not relate in any way to the students’ own connection to a community, the following word cloud, generated using R, illustrates the importance of the concept in the blogs.

Illustration 1: Word Cloud of Word Frequency in Students’ Final Blog Posts



These findings suggest the importance of service learning in public relations education as an avenue for students’ self-expression, connections with community, and personal growth.

Discussion

In a post-pandemic era of education, the engagement and community fostered through service-learning could be an invaluable asset for higher education in general and public relations education in particular. By connecting students with nonprofits and other community organizations, volunteer-based learning experiences like the one investigated in this study offer more than the chance to hone professional skills in the community that might later serve important vocational objectives. This type of pedagogy can bring to a liberal arts education the opportunity for civic engagement, cultivating the type of service that underscores the continuing value of the college experience and the ethical foundation that it offers students. By broadening students’ understanding of others, enhancing their sense of mission and purpose, and connecting them with new communities, service-learning can nurture the type of education that is not easily forgotten. Not only are students given the tools to enhance their public relations portfolios, but they are also equipped to build relationships with a public that might have different values, experiences, and challenges. In this context, community becomes a key to the learning process.

Like any study, this research has some important limitations. Although the results of student blogging are being attributed to the service-learning methodology, the content of the students’ websites also might be shaped by classroom instruction, peer discussions, faculty expectations,

and other models that the students found. The sense of community described by the students might not be as sustaining or authentic as the blogs suggest. The importance of these service-learning experiences also may not be as long lasting as one might hope. A follow-up longitudinal study might be the next step in investigating the implications of this textual analysis. In addition, a textual analysis approach to the investigation of service-learning might also be used in other areas of marketing education. While courses in public relations writing and principles are ideal for this type of educational approach, other marketing coursework would also lend itself to service-learning assignments and even to blogging exercises. In these other marketing areas, further investigation through textual analysis might yield additional insights.

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Chart 1: Word Frequency for Sample of Students' Blog Posts

WORD FREQUENCIES:

community : 51	just : 17
will : 32	love : 17
life : 30	time : 17
people : 29	help : 15
God : 22	many : 14
one : 20	like : 14
can : 20	kids : 14
really : 19	much : 13
part : 19	way : 13
know : 18	important : 13
just : 17	

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ChatGPT In Higher Ed: How To Navigate And Incorporate

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Abstract

ChatGPT has been making headlines over the past year and half. The chatbot has passed the SATs, the bar exam, and even a medical licensing exam. What implications does this new technology have for higher education? This article reviews the academic uses of ChatGPT in the university from both the professors' standpoint and the students' perspective. An Appendix is included showing examples from both of these perspectives so that readers can see how writing prompts certain ways produce results. Engaging students with incorporating this chatbot in ways it is being used in the corporate world was also addressed. We examined the potential uses and abuses of this emergent technology. Through this paper we will demonstrate that ChatGPT can be used to aid professors and students alike, though it is not a complete solution, and it is not without risks.

Keywords: AI, ChatGPT, higher ed, abuses, uses

Artificial intelligence in the form of chatbots has made great strides in recent years. ChatGPT, the best-known chatbot, has been making headlines. This tool, now owned by Microsoft, continues to advance in capability. This capability tends to inspire awe. Awe can mean veneration or wonder, but it can also mean dread or terror (Merriam-Webster, 2003). We will deal with both reactions.

We must begin by acknowledging that ChatGPT is astonishing. ChatGPT did better than 90 percent of high school students on the SAT (Leswing, 2023). According to the American Medical Association, it earned a score of 60 percent on the United States Medical Licensing Exam, but this was a passing grade (Lubell, 2023). A similar South Korean study found that ChatGPT scored 60.8 percent on the more specific parasitology exam (Huh, 2023).

If that wasn't remarkable enough, it also passed the legal profession's bar exam with a score close to the 90th percentile (Weiss, 2023). This is an impressive showing for the emerging technology, but its deficiencies are also astounding. ChatGPT can answer legal questions, but it would, for example, have a difficult time understanding why lawyer jokes were funny. It is this contrast between amazing feats and downright stupidity that is so interesting.

In the rise of artificial intelligence (AI), we see a parallel to the rise of the computer. In 1966,

Drucker wrote:

The danger is being aggravated today by the advent of the computer and other new information technology. The computer, being a mechanical moron, can handle only quantifiable data. These it can handle with speed, accuracy, and precision. It will, therefore, grind out hitherto unattainable quantified information in large volume. One can, however, by and large quantify only what goes on inside an organization—costs and production figures, patient statistics in the hospital, or training reports. The relevant outside events are rarely available in quantifiable form until it is much too late to do anything about them. (2002, Kindle Location 7472)

In short, chatbots, like computers before them can do some things amazingly well, but other things are not as easily replicable. The question is how far we can extend the artificial as a tool before we experience negative consequences, or perhaps what negative consequences inherently co-exist with the benefits we accrue from the use of AI technology. This paper reviews the academic uses of ChatGPT from both the standpoint of the professor and the student.

Literature Review

What is AI?

Artificial Intelligence (AI) has been defined as “the use of computational machinery to emulate capabilities inherent in humans, such as doing physical or mechanical tasks, thinking, and feeling” (Rust & Huang, 2021, p. 31). It takes raw data, runs it through a proprietary computing procedure, and then creates answers based on the known information to apply it to a variety of questions or problems.

Davenport and Ronanki (2018) described AI not just in relation to its underlying technology, but rather in light of its marketing potential and business applications such as automating business processes, gaining insights from data, or engaging employees and customers. AI is breaking new ground and continuously helping deliver more value to its users (Kumar et al., 2019).

Consequently, AI remains at the forefront of revolutionizing the marketplace (Henkel et al., 2020), and now the classroom. AI can help in the selection of products by advertising messages geared toward an individual’s preference, prices for products, and website content (Haenlein & Kaplan, 2019). AI can also deliver gift ideas for loved ones, suggest dinner options complete with recipes and shopping lists, or it can even write a paper. It is gaining momentum because of an explosion of new data that can train algorithms, and new applications are becoming possible due to the rapid advances in technologies and computer power (Bornet et al., 2021). We will explore what this means for the university.

Challenges with AI

There are problems with AI—some of which can be overcome with the correct programming—and other problems that seem insurmountable. Hagedorff and Wezel (2019) identified 15 specific challenges for AI. They concluded that some were time-dependent (e.g., that they would likely be solved over time), and others may simply be insurmountable. We will look at each category in turn.

Time Dependent. AI is dependent on the past. That is, because outputs depend on inputs, AI can only perpetuate a future that is like the past. This leads to a second problem of potential bias. The coders are disproportionately male, and their viewpoints could skew perspective in training the technology. Moreover, coders are in short supply, and this condition cannot be overcome quickly. To complicate matters, engineers are trained in technology, not ethics. They could inadvertently create new problems chasing technological capabilities.

Potentially Insurmountable. First, the basic problem with AI is that while it represents reality, it is not reality. The map is not the terrain. Moreover, it may not be possible to provide maps that eliminate distortions and bias. This is because the systems are reflections of their creators. Moreover, as in all things, hidden costs are difficult to account for. We might not know when we are doing more harm than good in our quest for ever-greater technological efficiency. Finally, building secure systems may be impossible as each advance may create additional opportunities for bad actors to do bad things (Hagendorff & Wezel, 2019).

One great concern in higher education is potential job displacement of professors (Taecharungroj, 2023). We have seen this before with the iron horse (trains), the automobile that displaced actual horses, and planes that displaced both for long journeys. When it was first introduced, electricity was a fire hazard, but less of a fire hazard than fire itself. A single hammer can go wrong with limited consequences. But artificial intelligence can go wrong much more quickly and do more damage. The same tool used to give customers what they want can be used to upend their privacy. (Hiott & Gerdes, 2022, pp. 5-6)

What is ChatGPT?

ChatGPT is an artificial intelligence (AI) chatbot that can interact with humans easily using natural language. It can answer questions, synthesize information, engage in creative writing, and create elaborate computer code. When we asked ChatGPT how it understood itself, the interface replied:

Chat GPT, also known as ChatGPT, is an AI language model developed by OpenAI. It is based on the GPT-3.5 architecture, which stands for "Generative Pre-trained Transformer 3.5." ChatGPT is designed to generate human-like text responses given a prompt or a conversation. It can understand and generate text in a conversational manner, making it suitable for various applications such as chatbots, virtual assistants, and natural language interfaces.

ChatGPT uses deep learning techniques, specifically transformer neural networks, to process and understand text input. It has been trained on a massive amount of data from the internet to learn patterns, grammar, and context, allowing it to generate coherent and contextually relevant responses. ChatGPT has the ability to engage in conversations, answer questions, provide explanations, and generate text on a wide range of topics. (OpenAI, 2023)

ChatGPT has arrived on campus, and we must deal with this reality. Like all technology, it can be used for good or evil, and we are wrestling with the implications. "Schools have already

started banning ChatGPT because students can use it to cheat, some countries have blocked their citizens from accessing the ChatGPT website, and there are a heap of ethical and legal considerations when it comes to AI” (Hughes, 2023, para. 3).

Emergence of Chatbots. ChatGPT was created by OpenAI, a research company founded and funded by figures such as Elon Musk (Tesla and Twitter), Peter Thiel (PayPal), and Reid Hoffman (LinkedIn). ChatGPT is not the only chatbot; it has competitors, but ChatGPT is the most well-known brand name (e.g., think Kleenex vs. Puffs or Scotties).

ChatGPT took the tech world by storm. How long does it take a tech company to gain a million subscribers? It took Twitter 2 years, Facebook 10 months, Instagram 2.5 months, and ChatGPT just 5 days (Buchholz, 2023).

Competition Between Chatbots. ChatGPT is not the only chat bot that has arisen in the process. It has competitors in Google’s Bard, Microsoft’s Bing, and Perplexity.ai (Makhyan, 2023). Perplexity was founded by lesser-known figures who worked for Bing, DeepMind, Facebook AI Research, Google Brain, OpenAI, Quora, NYU, and UC Berkeley (Perplexity AI, 2023). However, because ChatGPT is the leader in the field, unless otherwise noted, we will refer exclusively to ChatGPT 3.5 (the free version accessible at the time of this writing).

Uses of ChatGPT in Higher Education

ChatGPT is a potential game-changer in education. We have faced similar situations before. When calculators arrived on campus, when the computer arrived, and when smart phones arrived, predictions of doom and gloom abounded. But in each scenario, there were possibilities as well as dangers.

ChatGPT can be used in a variety of ways. It is very good at creative writing, excellent at performing custom searches, helpful in editing, and useful at relaying facts, assuming it has been trained in those facts. Students can use it to organize, study, or cheat. Professors can use it to research, grade papers, perform repetitive tasks, and even write tests. In what follows below, we will examine the uses first for professors and then for students.

Efficiency for Professors

ChatGPT can be used to streamline work that professors have to do. Some have argued that it may make professors obsolete (Taecharungroj, 2023), but others argue that while it will change what faculty do and how they do it, professors will be needed regardless of how intelligent chatbots become. The same line of reasoning applies to programmers and white-collar professionals in other fields.

We have briefly described a number of uses of ChatGPT that we have actually tried. The complete findings are provided in the appendices. We used ChatGPT to write better emails, write letters of recommendation, generate novel ideas, summarize complex information, write tests, grade papers, and conduct academic research.

Writing an Email. This first exercise seemed a bit foolish. After all, we have been writing emails for years, but we were surprised by the result. This was the prompt submitted to

ChatGPT:

Reply to this email from my colleague rescheduling with a Zoom meeting at the time she requested. Tell her I have been working on the paper. Be encouraging. Here is the original message:

I had a sick kid for the end of last week into the weekend, so I wasn't able to work on the paper like I had hoped. Could we Zoom on Wednesday at 9am instead please? I'll work on Monday and Tuesday to have it ready. :)

Because I added instructions to “be encouraging,” ChatGPT wrote a far more encouraging message than my initial one-line response. This is just part of the response:

No problem at all! I completely understand the challenges that come with having a sick child, and I hope they're feeling better now. Thank you for letting me know about the change in plans.

I've been working on the paper diligently and making good progress. I'm confident that with the additional time, I'll be able to have it in great shape by our rescheduled Zoom meeting on Wednesday at 9am. (see Appendix A).

While I could have written an encouraging response, ChatGPT provided the sentiment I would have used. While this is a small example, ChatGPT can mine significant amounts of data to generate responses. These can be integrated into your email application with email extensions such as Mailbutler which is designed to draft messages, summarize email, and automate email processes using ChatGPT (“Improve your email,” 2023).

We would warn readers that while ChatGPT can provide a well-written response, you will still have to review it and edit its output. However, with the right prompts, ChatGPT converts the writer into a reviewer.

Writing a Letter of Recommendation. A colleague asked one of us to write a letter of recommendation for a student applying for a graduate assistant position. I immediately replied:

“I taught him in the MBA program. He was always conscientious. If I could have hired him when I was the grad program director in the College of Business, I would have. Zero reservations. Do you need more?”

Then, I thought about running it through ChatGPT to create a more formal letter of recommendation. Because I did not tell ChatGPT the name of the institution where the graduate assistantship was available, it filled in “at [Your Institution]” as a placeholder. I had to revise this letter a bit, but ChatGPT amplified my remarks into a glowing letter of recommendation, and it did most of the work for me in a matter of seconds (see Appendix B).

Generating Ideas. We asked ChatGPT to provide a list of the core tenets of servant leadership as we were familiar with the literature. It returned a reasonable list that was a decent summary of the concepts of servant leadership. It did not return Frick or Greenleaf's list. It did not cite its

findings because I did not ask it to.

I asked for a summary, and it told me about service, empathy, humility, collaboration, development, ethical behavior, stewardship, vision, healing, and commitment to the growth of others (OpenAI, 2023). There was nothing in the response that we would have considered incorrect. So, we asked ChatGPT a follow-up question:

Provide 3 different ways that I can explain each core tenet of servant leadership to an audience that is unfamiliar with the topic. Cover each of the major ideas, provide examples, and write in a way that a fifth grader can understand.

Again, it generated creative ideas explaining in language a 10-year-old could understand. A servant leader's actions were likened to those of a superhero trying to help people, an empathetic friend, a team captain who makes sure everyone gets to play, cheerleaders, teachers who want to help their students grow, etc. (OpenAI, 2023). All the examples were on target.

Finally, we asked, "Explain how various characters in the original Star Trek series exemplified tenets of servant leadership."

ChatGPT provided remarkable results. We were told that Captain Kirk placed the service of the crew above his own well-being, sought to empower his crew members, and had a clear vision. Spock embodied humility, ethics, and growth. Dr. McCoy was empathetic, caring for both the physical and emotional health of his crew. Lt. Uhura exemplified collaboration and Chief engineer Scott ("Scotty") exemplified stewardship of both the vessel and his team (OpenAI, 2023).

ChatGPT's ability to make such connections was both accurate and creative. Had a student submitted this paper, we would have found their work impressive (see the full idea generation thread in Appendix C). This highlights both the potential and danger of ChatGPT.

We should note that due to the length of our requests, ChatGPT stopped in mid-sentence. But by simply commanding it to "continue," it picked up right where it left off and finished what it was asked to do.

Summarizing Complex Information. We asked ChatGPT to "review all of Shakespeare's plays. List each work in alphabetical order. Identify the city and country in which each took place." It did an admirable job synthesizing the material to answer the question (See Appendix D).

Writing a Test. Since one of us had a new course prep, we thought that we would seize the opportunity to see how well ChatGPT could do in writing a test. In our first pass, we asked ChatGPT to write a multiple-choice test based on Williams' and Denny's (2019) book *Character Carved in Stone*.

ChatGPT followed our instructions and wrote what it could, but it was clear that the entire book was not in ChatGPT's database, and it started giving some sketchy feedback in an attempt to fabricate a test. This is one of ChatGPT's flaws. If it does not know something, it has a tendency to make things up.

We then submitted the first chapter to ChatGPT. We asked it to read what I submitted, and create a multiple-choice test with the following prompt:

Instructions: Create a 10-question multiple choice quiz based on the following material using the following format marking the correct answer with an asterisk:

1. According to Williams,

A.

*B.

C.

D.

Focus on the character attribute primarily and the persons only secondarily.

Create the questions in the order in which you read the document. Introduce each question with “Williams wrote” or “According to Williams” or a similar introductory clause as the author’s last name is Williams.

ChatGPT did an impressive job creating quiz questions that identified major concepts as we asked (see Appendix E). Of course, we had to manage this process, alter some of the questions or answers, and make sure that the answers were consistent with the book. About 80 percent of the questions were solid. Some had to be revised, and 20 percent were either wrong or so bad that they were useless. Nevertheless, ChatGPT was frighteningly good at creating a first version of a test. This saved a great deal of time.

Grading Papers using a Rubric. We used ChatGPT to review papers and it worked quite well. One of the authors required the students to write blog posts about leadership. The professor then ran each post through ChatGPT to identify grammatical, structural, and other errors. The feedback was robust and provided the professor with ideas for his written comments (see Appendix F).

Using ChatGPT for Academic Research. ChatGPT-3.5—the free version of ChatGPT at the time of this writing—is not well equipped to conduct academic research. It is not trained on academic literature, and its database is only current through 2021.

We have found ChatGPT to be useful to summarize information as in the servant leadership discussion above. However, if you ask it to provide a literature review with citations, it sometimes makes things up. At the time of this writing, it would be advisable not to rely on ChatGPT-3.5 for academic research.

In June of 2023, lawyers who used ChatGPT to write legal briefs were sanctioned and fined by a judge for using AI to write briefs. ChatGPT created “citations of non-existent court opinions and fake quotes” (Mangan, 2023, para. 1). According to the judge, they were penalized because lawyers are responsible for the accuracy of their filings (para. 10). In the same way, academics are responsible for their findings. As we move forward, both academics and lawyers will have to take greater care to ensure the integrity of their research.

We understand that the paid version, ChatGPT-4 is much better than ChatGPT3.5, but all references must still be verified. As an alternative, Perplexity.ai did a reasonably good job providing research with links, but the links did not always match the citations. For this reason, ChatGPT-3.5 and other chatbots are useful if you treat it like Wikipedia. It is a useful starting point, but not something you cite or quote (see Appendix G).

Opportunities for Students

The corporate world has found numerous ways to already use ChatGPT to enhance the human labor force. Businesses can leverage ChatGPT or other generative AI in areas such as IT/engineering, marketing and sales, risk and legal, human resources, accounting and finance, to employee optimization (Chui et al., 2022). Professors can introduce students to generative AI services by mimicking these applications in the classroom such as: using ChatGPT to help with sales scripts, creating advertisements, helping with tag lines or social media posts, enhancing HR policies, creating code to update websites or solve problems, create balance sheets, or even entering the strengths of team members to have ChatGPT or a similar chatbot assign duties in a group project for optimization.

Student Uses

Students may also find ChatGPT to be useful. They can use ChatGPT to help write résumés, cover letters, and thank you notes. They can summarize essays and articles or reword them for clarity. They can use ChatGPT for idea generation and creative works. They can create practice tests, quickly create schedules to manage their time, use it to generate motivation, or look to ChatGPT for 24/7 support.

College/Résumé Cover Letters. Many students struggle with writing and tailoring cover letters for each company where they are applying. ChatGPT can help with this, and as an example we simply typed in:

Write a résumé cover letter for Proctor and Gamble’s marketing internship program. I am an honors student majoring in marketing and interested in brand development strategy. I have run the social media accounts for my business college. Make it polite and formal.

ChatGPT then delivered a very good example of what a professional cover letter should look and sound like (see Appendix H).

Thank You Notes. Students continually find themselves in situations where they need to send a thank you note, but they may want to have each one sound different. ChatGPT can help with this, reducing the time on task. For this, we provided ChatGPT with the following prompt: “Write a thank you note for my graduation gift of a towel, which is useful in college. Be grateful.”

ChatGPT returned a thank you note with exaggerated wording, therefore most of the response would be eliminated. The lesson here is that you must be specific with your prompt. However, it still produced several good sentences that could be easily edited (see Appendix I). ChatGPT is a useful tool, but it must be carefully managed. Your results will be only as good as the prompts you supply.

Summarizing Essays/Articles. As a helpful study tool, students can use ChatGPT to summarize extensive pieces of work such as essays, articles, or other published written works. To demonstrate this, we have asked ChatGPT to summarize the United States Constitution into 300 words. The Constitution, which originally was four pages long and consisted of seven articles, has since been amended and now includes 27 articles.

While ChatGPT reduced this sizable document down to 358 words, it clearly demonstrated how students can use this for other written works. One of the authors wrote his dissertation on the U.S. Constitution and found no errors in the summary.

Idea Generation for Creative Works. Students may find ChatGPT helpful when it comes to generating a short story, poem, or plot twist. Writer's block may be eliminated with the help of this AI service. Since students often struggle with idea generation, we asked ChatGPT to: "Create a short story line using the characters Spider-man, Green Goblin, and a unicorn."

It then created a short story where the hero, Spider-man, uses his protective instincts to defeat the villain, the Green Goblin. ChatGPT used previously written stories about the popular characters to write a plausible short story (see Appendix K).

Practice Test or Quiz Creation. Quizlet is a software application that many students use to prepare for upcoming tests or possible pop quizzes. ChatGPT can help in the same way, showing the students the answers after they have responded and then comparing what they missed.

We asked ChatGPT to create a practice quiz with four questions based on the marketing 4 P's (see Appendix L). Once questions were generated, we were then asked to take the quiz and let ChatGPT know when we were ready for the answers. Upon receiving the answers, it asked if we had further questions about any material that we may have missed.

Organizing Schedules/ Managing Time. Students struggle with managing their time appropriately when it comes to balancing classes, work, and study time on top of their social schedules. ChatGPT can help with this. Just by simply asking ChatGPT to help create a schedule to manage time, a student can find help by the day, week, or month in how to organize their priorities.

One of the authors provided ChatGPT with a few specifics about her week, we asked it to find study time around her commitments and filled in a few social activities. The schedule that was provided was more than we expected. In addition to her requests, it built in lunch breaks, a Sabbath, and break times (see Appendix M).

Improving Student Learning. ChatGPT can interpret questions from the student after a certain amount of use and provide helpful answers to increase their academic learning. The algorithms can analyze your learning style based on history and then ChatGPT can build recommendations based on targeted advice to help students improve (Mallow, 2023).

24/7 Support. Another way that ChatGPT is helping students excel in their academic endeavors is by being available 24/7 to answer questions and provide support. It is as if students have a

tutor on call at whatever time of night they are working on assignments. This helps educators as well, when students get questions answered, professors receive fewer panicked emails requesting an immediate response.

Motivation. Students are finding that ChatGPT increases motivation for academic work. Between getting help when it is needed, helping them manage their time, providing prompts, and taking care of mundane tasks, students have found this tool empowering. Additionally, ChatGPT also can provide personalized support and guidance (Mallow, 2023).

Student Abuses

Educators' main concern is that students are using ChatGPT to cheat, and not without good reason. The capabilities of ChatGPT, as we have previously shown, are vast. This creates an incentive for abuse by students who might be tempted to take credit for AI generated work. Students have been found to use it to answer test questions, write essays, or complete a wide variety of assignments (Taecharungroj, 2023, p. 6).

In addition to cheating concerns, privacy concerns are another risk. AI chatbots, like ChatGPT, Replika, and Snapchat's My AI "friend," encourage individuals to share information with the algorithms in exchange for personalized recommendations, social situation navigation, and even dress code help. One more concern for students and others is depending so much on AI assisted companionship that there is an increase in emotional instability (Kelly, 2023). Talking to chatbots increases isolation. This has already been shown to contribute negatively to mental health concerns.

Mitigating Abuses of ChatGPT

While ChatGPT seems to have extensive abilities for helping students as well as some potential abuses, there are ways to mitigate the abuses. First, professors will have to change what they are doing. They may have to create assignments where ChatGPT can be an aid, but not fully complete them. For example, assignments that are project-based scenarios allow ChatGPT to inform the students work but not think through and answer it for them.

Second, professors might consider having students write an assignment with ChatGPT. Then the students would place this document into something like a Google doc in order to track changes. The instructor could then see all the places where students edited or needed to correct information (Blouse, 2023; Chandy, 2023). This approach demonstrates that the student is engaged in the learning process.

Third, there are AI detectors that can help uncover whether a student has used ChatGPT to submit an assignment. One of the most common of these resources is GPT Zero, which was developed by a Princeton graduate student and has been shown to have over 98% accuracy in detection. Another detection service is CopyLeaks with extremely high percentages for correctly identifying whether a machine or a human created the work. Finally, Turnitin, which many professors already use, has included an AI detection component. While Turnitin is currently the least accurate, it is gaining more competency every day. Its developers are hopeful that it will be a trustworthy resource before the end of 2024. Here are a few useful links

- GPT Zero (<https://gptzero.me/>)
- Turnitin (<https://www.turnitin.com/search?q=AI+detection&language=>)
- CopyLeaks (AI detection: <https://copyleaks.com/ai-content-detector>)
- National Education Association (NEA) on Pros and Cons of AI (<https://www.nea.org/advocating-for-change/new-from-nea/chatgpt-enters-classroom-teachers-weigh-pros-and-cons#:~:text=The%20biggest%20concern%20is%20cheating,be%20%E2%80%9CAI%2Dproof%E2%80%9D>)

Conclusion

After writing this paper, we thought it would be interesting to let ChatGPT write our conclusion. Here it is, unaltered by the human authors:

The integration of ChatGPT in education necessitates a cautious approach that addresses concerns while leveraging its capabilities. By promoting ethical use, ensuring academic integrity, and safeguarding student well-being, ChatGPT can become a valuable tool in the educational landscape, enhancing learning outcomes and empowering both students and educators. (OpenAI, 2023)

ChatGPT summed up the article very well, but the addition of future research possibilities were not included which is important for further progress on this topic.

Future Research

As the corporate world expands its use of chatbots like ChatGPT, more ways need to be researched on what is the most beneficial ways to expose students to this new technology. There is still a lot to learn about privacy concerns and the ethics involved with using AI chatbots, which would be another beneficial research stream. Lastly, as this technology progresses and increasingly sounds more human-like, another area of study would include keeping up with how professors and employers alike can detect the misuse of AI.

Analysis

While there are abuses associated with ChatGPT, this article spoke to several ways this new technology can benefit higher ed professionals as well as students. Discussing better prompt writing, how to identify the use of AI chatbots, and increasing efficiency in the classroom were all ways that ChatGPT was showcased allowing users to navigate and incorporate it into their lives.

Appendices showing ChatGPT Prompts and Responses:

<https://docs.google.com/document/d/1ZX11ugOZpTHQeTUo1Bgtirbjq4jeNCr2cRK0E4r1XQ/edit?usp=sharing>

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Track: Marketing Education/Experiential Learning

ID#: 1809

MARKETING RESEARCH/ANALYTICS

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Team Selection Applications Using Subjective and Objective Factors: An Analytic Approach

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Abstract

Team-member assignments are relatively common tasks that many project managers must perform. A variety of subjective (i.e. personal preferences, working with people with good quantitative and personal communication skills) and objective (i.e., times availability, years of experiences, previous knowledge) factors are routinely used, but not in a systematic way. With the growth of open-source software, in this case R-script, a series of coding and assumptions were created to help deal with this problem, especially based on published work by Hübscher (2010). This theoretical research effort is structured by an introduction and general problem statement, project description, background (why individual preferences are important), problem definition (subjective vs objective outcomes, basic solutions, challenges of this problem), techniques, and experimental evaluation.

Keywords: Business Analytics, R-Script, R-Markdown, Talent Selection, Team-Member Selection.

INTRODUCTION

Importance of Proper Team Selection

The objective of forming groups for various tasks are commonplace in the business environment (Smith, 2011; Smith & Offodile, 2008). Many organizations have found themselves in the difficult situation that having appropriate people with the skills they need (Casimiro, et al., 2015; Guest, et al., 2006; Oandasan, et al., 2009). However, with various subjective and objective factors that team members personally prefer making the selection process more complex (Brewer & Flavell, 2020). With the improvements in data science and the mass digitization of information resulted in computational analysis of decision making.

Purpose and Project Description

The objective of this theoretical research is to define, formulate, and solve a mathematical optimization model. Initially, the assumptions of the project consist of 12 team members, and the project manager would like to form four groups of three team members each for illustrative purposes. The goal is to ideally maximize the chance that each group will do well on the assigned project by combining the team with members that have individually the proper talents and skills (objective factors) necessary to perform the task at hand. Undoubtedly, it would be appropriate to include team member preferences (subjective factors) that should lead to a team that is about to communicate and work well together. This team member assignment problem is approached from a professional/managerial perspective in the actual assigning individuals to research projects. There must be a type of prioritizing these intrinsic and extrinsic motivational factors in order to approach this problem from a theoretical and systematic methodology. These

factors will be discussed and simplified during the model-building process.

Problem Identification

Preconditions of the Predictive Model

In defining the problem, each group should have exactly three qualified individuals. The basic objective function is to maximize the chance of success for each group on a project. The project manager must decide on the intrinsic and extrinsic motivational factors affecting the success of their groups. Originally, the traditional approach was to set the problem-solving technique using the traditional LP model via `lpsolveAPI`, but decided against it due to too many and often confusing constraints.

The approach that was decided on was to create a relatively common and intuitive set of easily understandable factors of success (i.e. talent, emotional stability, expertise, gender preferences). These factors are rarely predictive in group preferences and determine successful interaction and performance, but represent a good starting point. For simplicity sake, each potential team member will be allowed to use three factors. However, each individual must decide on their own weights for each factor. Then, the project manager in assigning the teams needs to evaluate the individuals that are chairing each project group and generate a rating preference. Theoretically, team members will choose their first group preference based on their highest score, followed by their second, and third choices.

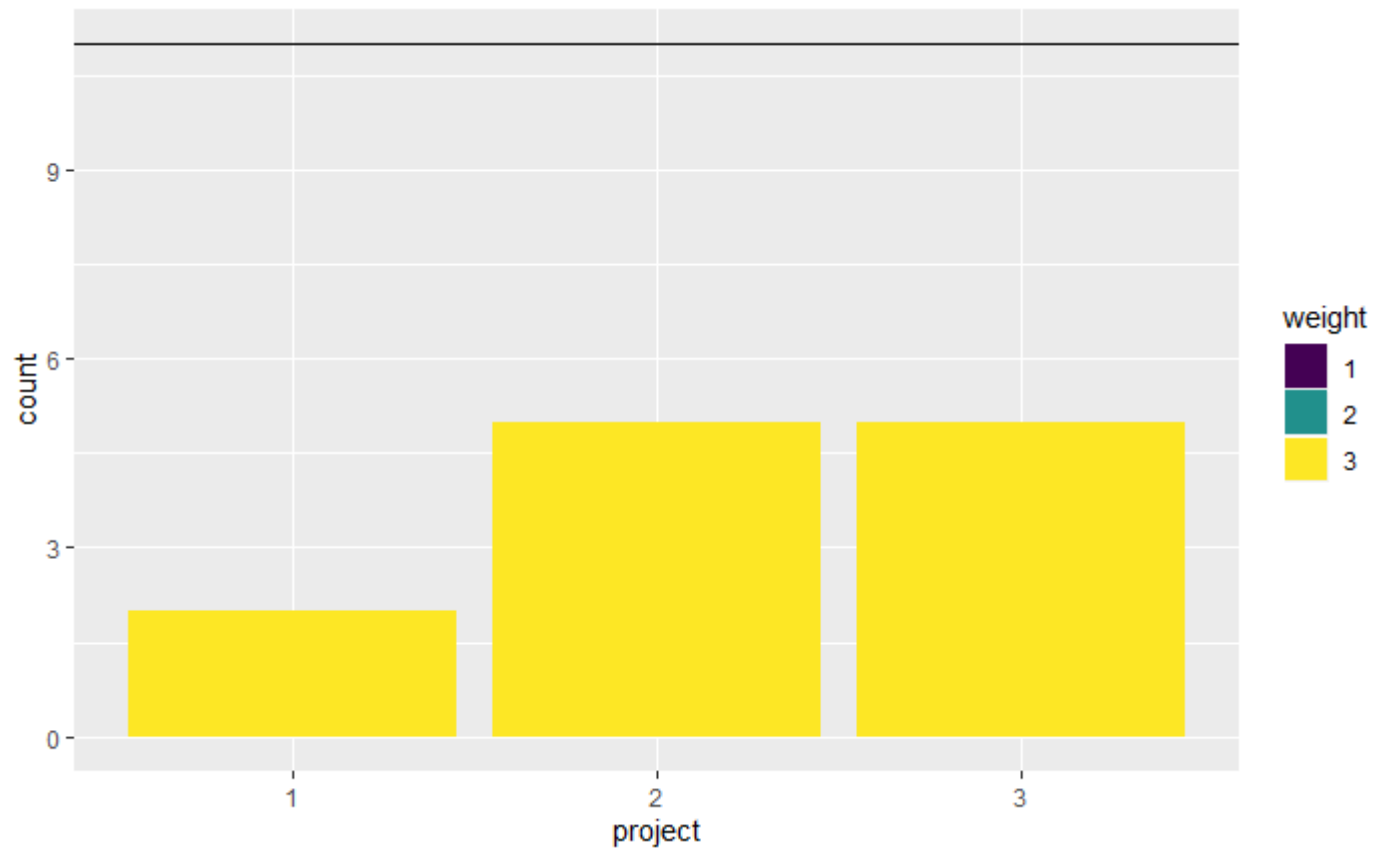
General Problem Statement

As previously stated. Each potential team member will choose their first group preference based on their highest score, followed by their second, and third choices. The basic constraints that are assumed in the development of the model are that each group has the same capacity and is assigned to exactly one group. The expected value (EV) is based on the subjective weight assigned to each factor and given in Eq. 1. Please note, the weights are defined as 1 = the lowest preference, where 5 = the highest factor. The ultimate goal is to maximize individuals' likelihood of receiving their best preference choices.

(Eq. 1) $EV = \text{weight1 (co-worker gender)} + \text{weight2 (relevant project experience)} + \text{weight3 (years of successful professional employment)}$.

A series of coding in R resulted in the final solution. Upon inspecting the results of the model solution, all 12 potential team members got their top project preference (as expected). In total, 0 individuals were assigned to their second choice and 0 individuals got their least preferable project assignment. The project team assignment can be visualized graphically by using `ggplots` after the following execution of code as found in Figure 1.

Figure 1. Final plot of the number of votes for each available project grouped by the preference (1, 2, 3).



Conclusions

As demonstrated from the coding and the experiment, a solution was found. Of course, with only 12 individuals and 3 project preferences among 4 project teams, it was almost certain that we could accommodate them. The challenge would be with a significantly larger n-size. That can be simply done by changing the initial settings at the beginning of the R-script. In terms of the model development, the following steps were followed:

- Introduce a binary variable $x_{i,j}$ that is 1 if student i is matched to project j .
- As an objective we will try to satisfy preferences according to their weight.
- Assigning a student to a project group with preference 3 gives 3 points, etc.
- Total capacity of the project groups is enough for all team members.
- Install library(ompr)
- Install library(ompr.roi)
- Install library(ROI.plugin.glpk)
- Install library(glpkAPI)

The model was based on work by Hübscher (2010), the model sense is to maximize the potential members' team reference rankings via a mixed integer linear optimization problem that resulted in 48 binary variables and 16 constraints. When samples of 50+ were employed, only had 2-3

persons not getting their 1st selection preference. Interestingly, no potential team members got their 3rd preference.

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Track: Marketing Research/Analytics

ID#: 1751

MARKETING STRATEGY

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CEO Integrity's Influence on Firm Digital Orientation: How CMOs and Ad Intensity Drive Digital Orientation

BEST ABSTRACT IN TRACK

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Extended Abstract

It has been argued that adaptation of digital technologies can increase the value of a firm (Chen & Srinivasan, 2023) while at the same time allowing organizations to remain competitive (Westerman *et al.*, 2011). Nowadays, most companies are actively embracing several contemporary technologies (McKinsey and Company, 2022). A key factor for introducing digital technologies is the strategic orientation of the CEO towards digitalization (Gupta *et al.*, 2017). Effective leadership is built upon CEO integrity (Brown & Treviño, 2006) and integrity is among several factors that might affect the digital orientation of a firm (Ano & Bent, 2022). This paper examines the role of CEO integrity on the digital orientation, based on upper echelon theory and the relationship between integrity and risk taking (Suchman, 1995). It also examines the moderating role of important marketing-related factors such as the presence of a CMO, advertising, and R&D intensity, thus combining the perspectives of management, marketing, and organizational theories. Based on data from 213 US public companies covering 741 firm-years, the paper provides evidence supporting the argument that high-integrity CEOs are more risk-averse resulting in much slower steps towards the digitalization of a firm. The presence of a CMO and advertising intensity reduce the negative effect of the CEO integrity, while intensity of R&D has the opposite effect.

The personality traits of the CEOs have a significant impact on their behavior and decisions (Kashmiri *et al.*, 2019) including their important choices for technology adoption and digital orientation (You *et al.*, 2020). It has been argued that external factors such as market regulations (Mao & Zhang, 2018) and company incentives (Sheikh, 2012) can also have an impact on such decisions. Digital orientation is affected not only directly by the decisions of the CEO but also indirectly by the guidance and motivation the CEO provides to the employees (Huang *et al.*, 2005), according to the charismatic leadership theory (Dyrengr, Hanlon, and Maydew 2010). The following hypotheses are formed:

- H₁: CEO integrity has a negative effect on digital orientation of the firm.*
- H₂: A CMO attenuates the negative effect of CEO integrity on digital orientation*
- H₃: Advertising intensity attenuates the negative effect of CEO integrity on digital orientation*
- H₄: R&D intensity amplifies the negative effect of CEO integrity on digital orientation*

This paper used specialized text analysis software (DICTION) to examine the contents of shareholder letters. Causation words used by a CEO provided a measure of their integrity, based

on libraries and methodology developed by Dikolli *et al.* (2012). Shareholder letter analysis was also used for examining digital orientation (Short *et al.*, 2010) based on libraries developed by Kindermann *et al.* (2021). CMO impact was calculated as a binary variable indicating presence or absence, while advertising and R&D intensities were calculated as a percentage of corporate total assets.

Analysis of the study was based on fixed effects regressions, testing hypotheses H1 to H4 for each firm for the select period. Control variables included the 3 described moderators plus firm and CEO related characteristics. The study found that CEO integrity and firm's digital orientation have a significant negative correlation, thus H₁ is confirmed. CMO presence attenuates the relationship, confirming H₂ and the same is true for advertising intensity, confirming H₃. On the other hand, intensity of R&D has the opposite effect, amplifying the relationship between CEO integrity and firm's digital orientation, thus confirming H₄.

Based on the evidence provided by the analysis of the study, we can conclude that a firm with a high-integrity CEO is expected to have a weaker orientation towards digital orientation. High R&D intensity amplifies this effect, while presence of a CMO and advertising intensity tend to decrease the negative relationship between CEO integrity and firm's digital orientation. This paper makes a theoretical contribution to the upper echelon theory by providing additional evidence on the ways CEO's personal traits affect a firm. It also highlights some potentially undesirable effects of certain traits, such as the CEO integrity, adding to previous research identifying mostly positive impacts (Irianto *et al.*, 2009). Future research needs to consider the effect the CEO's integrity and other personality traits can have in the pace of adopting contemporary digital technologies. The findings of this paper also offer practical implications regarding the evaluation of the CEO integrity during the hiring process. Since high integrity is a positive trait that can benefit the firm (Wiklund and Shepherd, 2003), the firms need to establish an environment where this personality trait of the CEO will not have an adverse impact on the desired digital orientation of the firm. CEOs who prioritize integrity can also benefit from the findings of this paper, by recognizing the implications of their integrity and taking actions such as working closely with a CMO and other top management to attenuate the possible effects of their high integrity.

Keywords: CEO Integrity; Digital Orientation; Chief Marketing Officer; Advertising; Research and Development

Track: Marketing Strategy

ID#: 1778

‘Ghost Franchises’ and Their Branding Challenges: Have They Eliminated Too Many ‘Touchpoints’?

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ABSTRACT

In the wake of the recent pandemic, restaurant owners have been exploring ways to save cost and reduce their dependence on dine-in customers. In their efforts to cut cost, ‘ghost kitchens’ (also called ‘cloud kitchens’ or ‘dark kitchens’) (Cai, Leung and Chi, 2022; Reiley, 2020), and among franchised food operators ‘ghost franchises’ (Conrad, 2021), have emerged. Ghost eateries rely on a site solely for food preparation, from which delivery drivers, either their own or third-party services such as *Grubhub*, pick up food orders. Several existing franchised brands have started separately branded ghost franchise concepts that offer delivery only (Conrad, 2021), while in other cases newly founded ghost franchise brands have begun to gain traction without being ‘chaperoned’ by an established brick-and-mortar concept.

Of particular interest are the implications of franchised branding attempts that rely exclusively on ghost kitchens, without any physical spaces in which customers directly interact with the brand. (Broderick, 2023). Key benefits ghost franchises offer are the cost savings inherent to this new model: Locations outside of high traffic areas come at significantly reduced cost without the need for a dining space, décor, furnishings, or parking. The proximity of sites to customers’ residences ensures the freshness of delivered meals. Further, ghost sites entail the ability to start a new brand without significant investment or delay and, just as important, to shut a brand down without wasting substantial assets. Relatedly, no lengthy searches for prime locations and construction schedules are required, and staffing is limited to the kitchen operation.

A brand is one of the most valuable assets of a franchise system (e.g., Paswan et al., 2016), and franchisor and franchisees both share a vital interest in maintaining and enhancing the brand’s equity. The franchisor relies on the brand to sell products, to attract franchisees and grow the system, and ultimately to justify the entry fee and royalties paid by franchisees. Franchisees, on the other hand, rely on the brand for customer traffic, loyalty, and the pricing of products. A critical question that arises in the novel context of ghost franchises is how branding is affected when the product itself, with few ancillaries, is the sole ‘touchpoint’ for customers. Franchising, in many ways, relies on branded uniform visibility which appears to get lost in a ‘ghost’ existence. Is brand equity reduced by a ‘slimmed down’ franchise version that relies on very few touchpoints, such as the mere actual product and the ordering process?

Many brands are being built nowadays based *solely* on an online presence, from *Amazon* to *Dell*. Yet, ghost *eateries* are a new phenomenon. Until recently, out-of-home food production was traditionally created by restaurants with a customer-interfacing brick-and-mortar presence.

Traditional brand ‘touchpoints’ in a food service context relate to the dining experience, service interactions and atmospheric brand elements. Will consumers trust brands whose physical food preparation sites are elusive? Food consumption is, at least in part, shaped by customers’ impressions of facilities, and food is closely related to consumers’ identity – “we are what we eat” (e.g., Twiss, 2007). Given the recent consumption trends toward local/regional food and buying directly from producers (e.g., Cappelli, 2022), will ghost franchises survive, and if so, how do they adapt?

The ghost franchise trend appears to have ebbed post-COVID in the US, whereas globally the concept continues to see success (Fantozzi, 2023). Is the crisis out of which ghost eateries have sprung ultimately also spelling their doom? Ghost kitchens were created as a response to a health crisis that left consumers scared and home bound, thus necessitating a *separation* of production and consumption – a niche eagerly filled by struggling franchise brands during the pandemic. Yet, in the wake of the crisis, consumers have become more focused on their well-being and a greater emphasis on healthy living and, thus, a heightened need to connect with their food, its source and its preparation – a *re-connection* of food production and consumption. Further, food consumption is often social, not the mere ‘intake of nutrition’ (e.g., Absolom and Roberts, 2011; Macht, Meininger and Roth, 2005). Have ghost franchises taken the reduction to the fewest touchpoints too far and, in the process, have disenfranchised the very customers they were targeting in the first place?

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Track: Marketing Strategy

ID#: 1744

Brand Voice: A Proposed Integrative Model Approach

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ABSTRACT

This paper explores the concept of brand voice, its application in communicating business strategy, and how it sets the framework for marketing strategy. This paper proposes an integrative model approach to measuring brand voice. Brand voice serves as a paradigm for communicating the firm's strategic intent and value proposition to customers and to focus attention on strategic alignment in internal and external aspects of the organization.

Keywords: Brands, Branding, Brand Voice, Strategy, Measures.

Relevance to Marketing Educators, Researchers, and/or Practitioners: With increasing attention to digital marketing and the use of marketing personas, this paper explores the concept of brand voice and proposes an integrative model of brand voice. Going beyond the idea of voice as tone or personality, this model uniquely includes organizational variables as antecedents to a firm's brand voice. It also ties the model to well-established consequences of brand perceptions, consumer engagement, brand loyalty, brand equity, and traditional revenue and profitability outcomes.

Introduction

In today's highly competitive market, a brand's identity and personality are crucial in distinguishing it from competitors. Since 1951, with the introduction of Tony the Tiger as a television mascot for Kellogg Frosted Flakes, marketers have used anthropomorphism or personification for inanimate objects to make an emotional connection between a firm's brands and consumers.

Brand voice provides a consistent and distinctive approach to communicating an organization's business strategy and articulating its marketing strategy. Brand voice refers to the distinct personality, tone, and style a company uses in all forms of communication (Aaker, 2014). It embodies the company's core values and aligns with its business objectives. Brand voice is consistent across all customer touchpoints, including advertising, social media, customer service, and internal communications (Keller & Swaminathan, 2020). This paper explores the concept of brand voice, its application in communicating business strategy, and how it sets the framework for marketing strategy. This paper proposes an integrative model approach to measuring brand voice.

Brand Voice in Communicating Strategies

The Role of Brand Voice in Communicating Business Strategy

An organization's business strategy provides direction and sets long-term goals. A cohesive brand voice ensures that these strategic objectives are communicated consistently and effectively to stakeholders. A well-defined brand voice ensures that all stakeholders align with the business strategy. This alignment fosters a unified corporate culture and strengthens the brand internally

and externally (Hatch & Schultz, 2003).

Consistency in messaging builds trust with customers, investors, and partners. When stakeholders perceive that a company's brand voice aligns with its business strategy, they are more likely to view the organization as credible and authentic (Cornelissen, 2020).

The Role of Brand Voice in Marketing Strategy

While the business strategy sets the direction, the marketing strategy translates this direction into actionable plans. Brand voice provides a framework for expressing the firm's marketing strategy by shaping the messaging and tone across all marketing channels and constituencies. A consistent brand voice across all marketing channels ensures unified messaging, reinforcing the brand identity and enhancing recognition (Aaker, 2014). A brand voice also provides guidelines for content creation, from social media posts to email campaigns. It helps marketers develop engaging content that resonates with the target audience (Keller & Swaminathan, 2020). A relatable brand voice fosters emotional connections with customers, increasing brand loyalty and advocacy. This emotional resonance is crucial for differentiated positioning in competitive markets (Pahwa, 2017).

Organizational Elements of Brand Voice

Vision, Mission, and Values

A strong brand voice clarifies the organization's vision, mission, and values. By articulating these strategic elements consistently, a company ensures that stakeholders at all levels clearly understand its strategic intent. A brand voice that integrates the company's values and strategic intentions shapes how the organization operates internally and presents itself externally (Kapferer, 2012).

Organizational Structure: Centralization vs. Decentralization

Brand voice can influence whether an organization adopts a centralized or decentralized structure. A robust and unified brand voice often necessitates a centralized structure where communication strategies are designed and controlled at a higher, more centralized level to ensure consistency across all platforms and departments (Men, 2014).

Internal and External Communications

Brand voice directly influences communication processes within an organization. Developing a brand voice involves setting guidelines that dictate the tone, style, and language used in all corporate communications. These guidelines ensure that every piece of communication—whether internal memos, press releases, or customer service interactions—consistently reflects the brand's identity (Keller & Swaminathan, 2020).

Marketing and Customer Service Integration

A well-defined brand voice leads to integrated marketing and customer service processes. A consistent brand voice enhances customer experience management by ensuring customers receive uniform messaging across all touchpoints, reinforcing the company's strategic intent (Lemon & Verhoef, 2016).

Organizational Culture

Brand voice shapes organizational culture by influencing employee behavior and engagement. When employees internalize the brand's voice, they are more likely to embody its values and principles in their daily activities and stakeholder interactions. This internalization can enhance job satisfaction and loyalty, as employees feel part of a coherent and purpose-driven organization (Schein, 2010).

A clear and appealing brand voice can attract talent whose personal values align with the organization's. Moreover, a consistent brand voice evident in all internal and external communications can enhance retention by reinforcing the organizational culture and making employees feel connected to the brand (Backhaus & Tikoo, 2004).

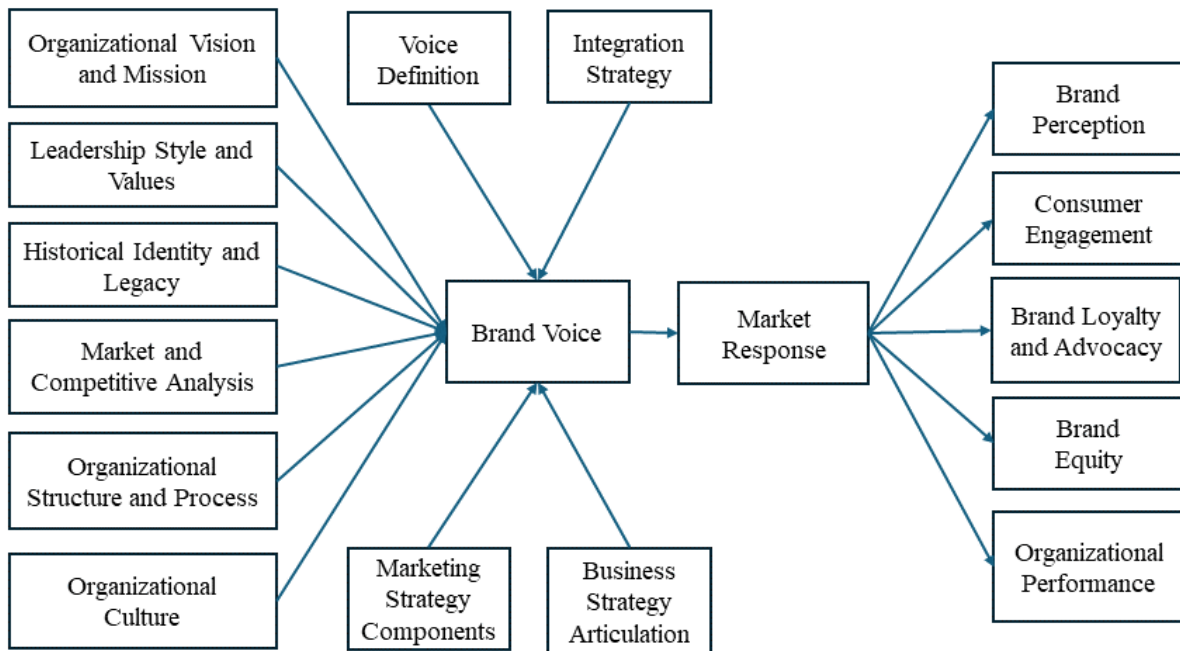
Building Trust with Stakeholders

A cohesive brand voice strengthens trust with internal and external stakeholders, a critical factor in strategic alignment (Cornelissen, 2020). Customers who perceive a company's brand voice aligning with its business strategy view the organization as more credible and authentic (Aaker, 2014). Trust encourages customer loyalty and strengthens strategic partnerships. Investors also gain confidence when a company's communications reflect its strategic priorities and demonstrate consistent messaging.

An Integrative Model Approach

We propose a model of brand voice that integrates the organization's antecedents and the critical inputs for formalizing a brand voice to articulate the organization's strategic intent.

Figure 1: An Integrative Model of Brand Voice



Organizational Antecedents

Our model incorporates organizational factors and market context as antecedents influencing the

content of the organization's "brand voice." Organizational vision and mission are the foundational elements that dictate what the firm aspires to achieve and how it positions itself in the market. From the top, leadership decisions, communication style, and personal values significantly influence the tone and content of the brand voice. The sustained influence of leadership provides an organizational legacy that gives a historical context that guides the development of a consistent or evolved brand voice.

The market and competitive analysis component reflect the organization's understanding of market dynamics and competitive positioning, shaping how the brand communicates its unique value. In the early-stage development of the firm's brand voice, the relationship between the organization's brand voice can be influenced by the organization's structure, processes, and corporate culture. However, the firm's evolving brand voice may exert an equally important influence over these organizational factors over time.

Table 1: Organizational Antecedents

<i>Variable</i>	<i>Source</i>	<i>Measures</i>
Operational Vision and Mission	The foundational elements dictate what the organization aspires to achieve and its position in the market.	Defines strategic intent
Leadership Style and Values	Leadership decisions, communication style, and personal values	Significantly influences the tone and content of the brand voice.
Historical Identity and Legacy	The existing perceptions and historical context of the brand.	Informs the development of a consistent brand voice
Market and Competitive Analysis	Understanding of market dynamics and competitive positioning	Shapes how the brand chooses to communicate its unique value
Operational Structure	Decisions on structure (centralization vs. decentralization), departmental configurations, and hierarchy levels.	Influences consistency across touchpoints, clarity of strategic objectives, and employee empowerment
Organizational Processes	Communication, decision-making processes, and customer interaction protocols.	Changes or adaptations in communications to encourage interaction and feedback
Organizational Culture	Corporate culture, employee engagement, and internal branding.	Influences the internal identity with a brand voice.

Brand Voice Development

This portion of the model focuses on the processes and inputs in a proactive organizational effort to develop and refine a brand voice. While the organizational antecedents provide a basis for authenticity, the connection to the firm's heart is through a focused articulation of the overall business strategy and its marketing strategy components. Brand voice is shaped by the purpose of the communication and the target constituency with a personality, tone, and choice of language to obtain the desired response. The language chosen for the management discussion in an SEC 10K filing differs from a social media post designed to further customer engagement.

Nevertheless, both must be consistent with the overall strategic intent to be viewed as authentic by the respective audiences. It reflects the effectiveness of the integration strategy across all organizational communications and customer touchpoints. Table 2 includes references that elaborate on the descriptions of the four critical variables in this process.

Table 2: Brand Voice Development Variables

<i>Variable</i>	<i>Description</i>	<i>Measures</i>
Business Strategy Articulation	How brand voice supports the clarity and dissemination of business strategy across the organization.	Hatch & Schultz, 2003 Pahwa, 2017 Men, 2014.
Marketing Strategy Components	The alignment of product development, pricing strategies, distribution methods, and promotional activities with the brand voice.	Keller & Swaminathan, 2020 Aaker, 2014
Integration / Alignment Strategies	Plans for integrating the defined brand voice across all organizational communications and customer touchpoints	Pahwa, 2017 Men, 2014
Brand Voice Definition	Determining the personality, tone, language, and purpose of brand communications.	Brand Personality Scale (Aaker, 1997)

Market Response

Organizational Performance

Revenue and profitability are the cornerstones of measuring organizational performance. From an investor perspective, the third measure is stock performance and return on investment. For purposes of evaluating organizational performance in the context of the proposed integrative model, a key financial measure is the return-on-marketing investment (Kotler & Armstrong, 2018)

- Sales Growth: Track changes in sales volume and revenue over time.
- Profit Margins: Monitor changes in profit margins as an indicator of financial health.
- Return on Marketing Investment (ROMI): Assess effectiveness of marketing expense.

Table 3: Market Response Variables

<i>Variable</i>	<i>Source</i>	<i>Measures</i>
Brand Perception	How consumers interpret brand voice and its alignment with their expectations and values.	Brand Personality Scale (Aaker, 1997)
Consumer Engagement	Consumer interactions with the brand across various platforms and touchpoints.	NPS(Reichheld,2003). Sentiment Analysis (Liu, 2012).
Brand Loyalty and Advocacy	The influence of brand voice on customer loyalty and advocacy behaviors.	NPS(Reichheld,2003). Papista & Dimitriadis , 2012
Brand Equity	Long-term benefits for the brand, brand recognition, loyalty, premium pricing power	Keller & Swaminathan, 2020

Organizational Performance	Impact on sales, market share, and overall business performance.	Internal reports, Annual Reports, SEC filings
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Consumers and Market Response

This model's consumer elements of market response incorporate brand perception, consumer engagement, and brand loyalty. For our model, brand perception measures how consumers interpret the brand voice and its alignment with their expectations and values. Customer engagement measures consumer interactions with the brand across various platforms and touchpoints. Finally, the brand loyalty component measures the influence of brand voice on customer loyalty and advocacy behaviors. Consumer response components are measured through market surveys, brand perception studies, and customer engagement data.

The Measurement Challenge

Measuring the effectiveness and impact of a brand's voice involves assessing how well the brand's identity and messages resonate with its audience. Unlike direct metrics like sales figures or website traffic, brand voice is qualitative and more nuanced, making it somewhat more complex to measure directly through standardized survey instruments. However, some approaches and tools can help capture data related to brand voice:

Content Analysis. Content analysis systematically examines the brand's communication materials, including social media posts, marketing materials, and customer service interactions. Analysts look for consistency, tone, clarity, and content alignment with the intended brand persona (Krippendorff, 2018).

Brand Personality Scale. The Brand Personality Scale allows companies to measure their brand's personality as customers perceive it. This scale includes traits across five dimensions—Sincerity, Excitement, Competence, Sophistication, and Ruggedness—that help identify the human characteristics associated with the brand (Aaker, 1997).

Net Promoter Score (NPS) with Brand Voice Attributes. While NPS typically measures customer loyalty, it can be adapted to include questions specific to brand voice. For instance, after the standard NPS question, follow-up questions can probe the influence of brand communications on the customer's rating (Reichheld, 2003).

Semantic Differential Scale. This tool is used to measure the connotative meaning of brand voice. Respondents are asked to rate a brand on a series of bipolar adjective scales (e.g., professional-unprofessional, friendly-unfriendly), providing insights into the emotional reactions elicited by the brand voice (Osgood, Suci, & Tannenbaum, 1957).

Social Media Sentiment Analysis. Automated tools analyze the tone and sentiment expressed in social media mentions and customer feedback. It provides quantitative and qualitative data on how the audience perceives and interacts with the brand voice (Liu, 2012). While no single metric is dedicated solely to measuring brand voice, combining these methods can provide a comprehensive view of how a brand's voice is perceived and its effectiveness in communicating the intended brand persona.

Summary and Call for Research

Our model proposes an approach that systematically explores the influence of brand voice across an organization's structure, processes, and culture, as well as its strategic and marketing activities, culminating in its market performance. Additional research is necessary to validate this model so that organizations can better understand how to strategically develop and leverage brand voice to achieve superior organizational alignment and market success.

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Track: Marketing Strategy

ID#: 1762

Inflation And Interest Rates, Consequences and Prospects for Marketing

BEST PAPER IN TRACK

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Abstract

An effective marketing strategy depends on a clear understanding of the economic conditions that will apply over the strategy's time horizon. Many economic factors must be considered; their choices depend on the geographic scale and times under consideration. For present purposes, the scale is national for the United States, and the period is the next two to three years. Given those, two economic factors will likely dominate planning: inflation and interest rates. Those phenomena's scope of influence and ubiquity set the ground conditions for any market planning effort. This paper will explore some of the effects of these variables and then indicate their prospects. A joint exploration is required as they are inextricably intertwined.

Keywords: Inflation, Interest Rates, Marketing Strategy Changes, Marketing Mix Changes

Relevance to Marketing Educators, Researchers, and/or Practitioners: Inflation and interest rates are necessary for understanding consumer experience, plans, and behavior. Current and expected prices and costs influence aggregate demand and choices within and between goods and services categories. Interest rates, the obverse face of the inflation coin, drive the purchase of durables, especially long-lived ones such as cars and homes. Market planning must incorporate forecasts for inflation and interest rates to have any hope of accuracy. Understanding what drives those variables underpins successful strategy choices.

Introduction

The United States experienced a prolonged period, beginning in 1982, of steady decline in inflation rates. This was a significant shift from the high inflation rates of the 1970s, mainly due to the oil crisis, deficit spending, and global economic factors. As Figure 1 shows, after three bouts of acceleration during the 1970s, a core measure of inflation, the sticky prices index, declined from 15.77% per year in 1980 to roughly 2% per year as late as August 2021. The same patterns were seen for more popularly followed inflation rate series such as the Consumer Price Index for All Urban Workers (CPI-U). At the same time, as Figure 2 shows, interest rates, as measured by the bank prime rate, fell from 21.5% in December 1980 to a low of 3.25% by 2009. That 3.25% rate was sustained for most of the following 12 years. All other interest rate series, especially consumer finance rates for credit cards and auto loans, displayed similar patterns.

Figure 1: Core Sticky Prices Inflation Index

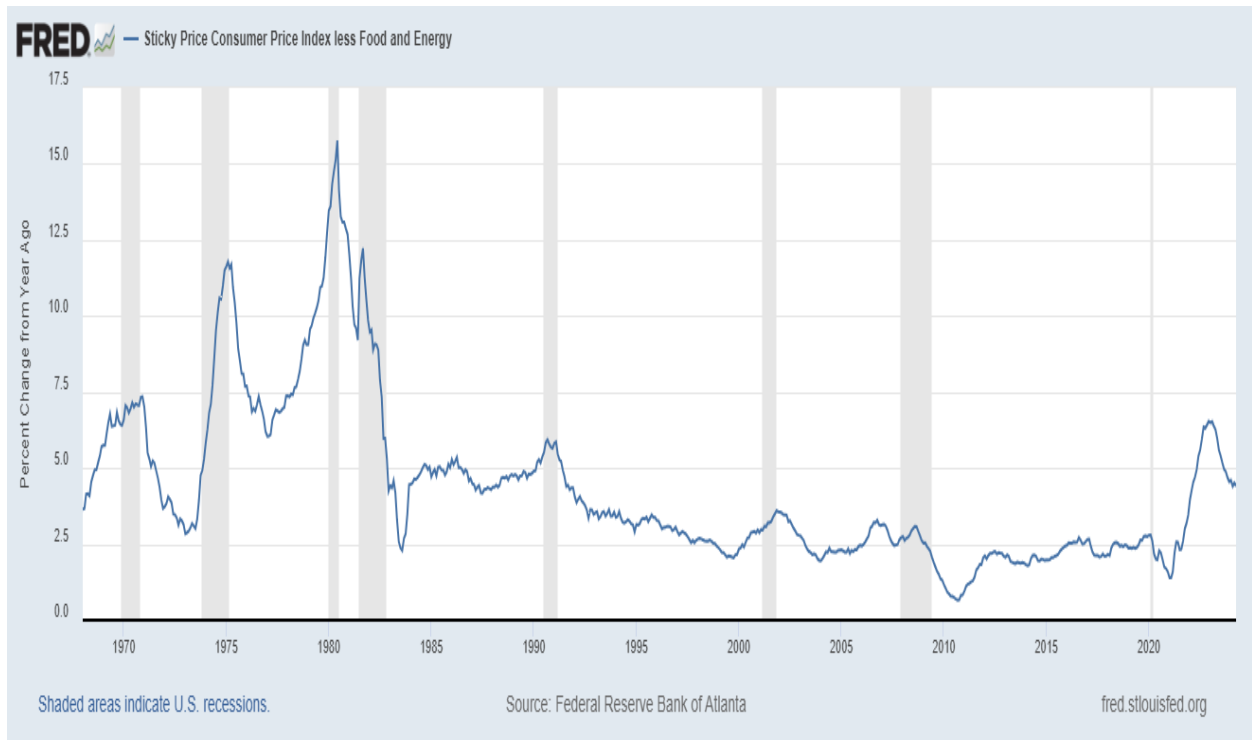
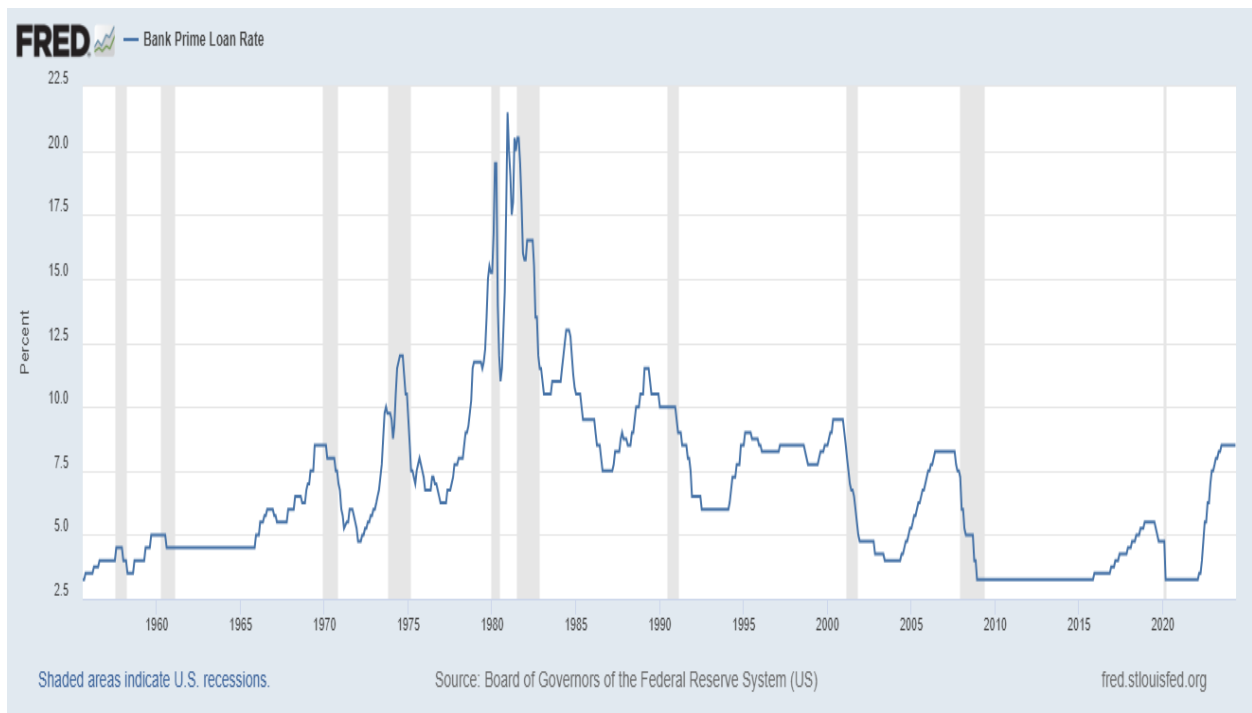


Figure 2: Bank Prime Lending Rate



These are important to reflect on as businesses and consumers adapted to the sustained and highly favorable economic conditions since Chairman Volker raised the Federal Funds rate to

22% in December 1980. The long experiences of both parties have conditioned their evaluations of current circumstances and predictions for the future. Thus, it was a rude shock when both inflation and interest rates accelerated in the wake of the Covid crisis in 2020. Denial that things had changed became commonplace in popular accounts. As will be argued subsequently, the last three years have marked a return to normal economic conditions, and both parties, however grudgingly, will have to adjust their actions and perceptions to a new reality. Inflation is likely to increase, on balance, in the future, as will interest rates. This will require considerable adjustment of thinking and action.

Literature Review

A series of searches using the terms interest rates and inflation (and variations thereon) involving several different engines turned up little in the way of refereed journal articles. This is consistent with the observation by Dekimpe and Heerde "... that the inflation literature is sparse" (Dekimpe & Heerde, 2023, p.322). However, there have been useful discussions on how marketers can respond to the changes in inflationary conditions.

Jensen and Rao (Jensen & Rao, 1988), using survey data, observed that consumers reported adapting their purchasing behaviors for both durables and non-durables (food items) to inflationary pressures. "... they reported a conscious effort in planning, purchase, preparation, and consumption activities. Consumers also reported brand switching, increased coupon utilization, looking for specials, and purchasing in larger quantities as a means of combating inflation." (p.467). It is worth noting that the survey responses were gathered when the soaring inflation of the 1970s had only been reduced to the 5% range by 1985.

Koenigsberg (Koenigsberg, 2022) suggests three strategic shifts as paths for action. Option 1 requires recalibrating and cleaning up the product portfolio by bundling or unbundling existing offerings. Option 2 involves repositioning the brand on value delivered, its price tier, or both. Option 3 revises the price model by moving to a subscription model, pricing per unit of consumption rather than simply raising prices. The latter runs the risk of firing customers.

Dekimpe and Heerde (Dekimpe & Heerde, 2023) posited three avenues for responses to inflationary pressures. The first focuses on actions to control costs by:

- Better controlling internal costs such as overhead, inventory holding, or labor costs.
- Passing the higher costs along to customers by way of price increases.
- Shifting the burden of reducing costs to suppliers.
- Altering the product assortment to include more items at lower costs.
- Integrating backward toward sources of supply.

The second avenue shifts the focus to customer actions. These include:

- Extending loyalty programs to previously ineligible items.
- Adding subscription-based products or services.
- Initiating price guarantee programs such as price-freezing or ceiling price guarantees.
- Offering more private-label products, more refillable products, or extending package architectures to offer more price points.

- Adjusting the content of communications to reflect consumers' experiences with rising prices.

They note that other actions of more questionable value, including shrinkflation (reducing the quantity in the package but not the price) and skimpflation (reducing product or service quality but not price), are more problematic. Both of these can tarnish a retailer's or brand owner's equity.

Bachman and colleagues (Bachman, Berg, & Sims, 2015) caution that thinking should be different when comparing durables purchases to non-durables. They note that inflation expectations are unrelated or negatively related to buying attitudes for durable goods such as cars. Instead, expected nominal interest rates – especially car loans and mortgage rates - have a significant negative relationship with current buying behavior. Further, expectations for higher rates in the future may accelerate purchases of durables in the present, producing an intertemporal shift and bringing future purchases back into the present. Providers run the risk of interpreting the increase in current demand as a sustained demand shift and thus building inventories in anticipation of demand that does not materialize.

One problem marketers can encounter when assessing inflation and interest rates is treating them as unrelated, thus thinking about them in recursive model terms. This ignores the well-known Fischer Effect (Investopedia), which argues that lenders price their loans, the nominal interest rate, in terms of the real (inflation-adjusted) rate of return they need to earn adjusted for the risks the borrower presents. Nominal loan rates, on balance, adjust with shifts in the inflation rate, declining as inflation subsides and increasing as it accelerates. Nominal rates also adjust as the borrowers' aggregate risk profile changes, either up or down. Current developments, especially surging delinquency rates for auto loans and credit cards, suggest that nominal interest rates will be higher for both reasons.

Signs of Consumer Stress Are Accumulating

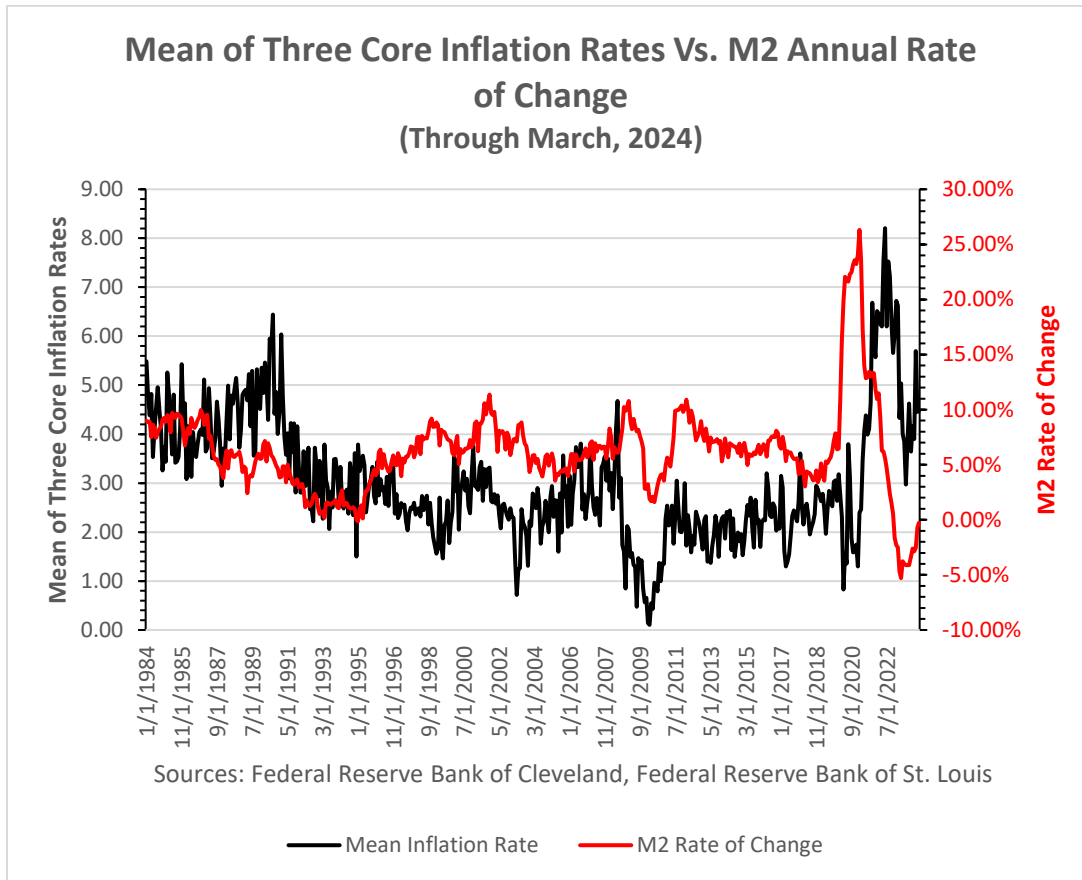
The Federal Reserve Bank of New York notes that delinquency rates have begun rising, with 8.5 percent of credit card balances and 7.7% of auto loan balances transitioning into delinquency in the last year. (FRBNY, 2024). The delinquency rate for auto loans was 2.66%, and for credit card balances, it was 6.36% as of the fourth quarter of 2023. Credit risk is on the rise at the same time that credit balances have soared. Total credit card balances stand at \$881 billion as of the first quarter of 2024. At the same time credit card rates have risen from 15.09% in February 2020 to 21.51% as of May 2024. (FRED 2). 60-month auto loan rates have risen from 5.15% in February 2020 to 8.2% as of May 2024 (FRED 3). It is no surprise that banks have been tightening auto load standards since 2021. (FRED 4) or that they have been sharply tightening credit card standards at the same time (FRED 5). None of this bodes well for purchase volumes, especially for durable goods. One can't escape a gnawing anxiety that consumers are becoming overextended and about to cut back. Measures of consumer sentiment are consistent with this, currently running at 79.4 as of March 2024 (UMICH 2024) and well below the average of 100 which marks the neutral point.

Prospects for the Future

Inflation:

Plans are based on forecasts, but forecasting any economic series as complex as inflation is difficult. Just deciding which inflation index to use is complex. There are a wide variety of indexes, each developed for different purposes. Moreover, the composition of a given index — its market basket components and their weights — is subject to change over time, as has been the case for the CPI-U, which has had repeated changes in both. Further, some indexes include or more greatly weigh volatile components such as food or gasoline, while others use more stable components like rents. For current purposes, the emphasis is on indexes that de-emphasize volatile components. Three widely available indexes are candidates. Two are published by the Federal Reserve Bank of Cleveland, the median CPI (Cleveland 1) and the 16% trimmed mean CPI available at the Federal Reserve Bank of St. Louis (FRED 6). The third is the sticky prices index published by the Federal Reserve Bank of Atlanta, available in different iterations on the Federal Reserve Bank of St. Louis website (FRED 7). Each has advantages, but the approach taken here is to average them as is shown in Figure 3.

Figure 3: Inflation and The Money Supply Since 1984



The explosion in the inflation rate that occurred during the COVID-19 years is obvious, as is its decline afterward. What is less well-remarked is the resurgence in inflation that began in July 2023 and continues to the present. The changes in the inflation rate are preceded by changes in the money supply, shown in red, suggesting a causal relationship. That would be consistent with the Austrian economics school of thought on causality, expanded and made more precise by

Milton Friedman, who insisted that inflation was always and everywhere a consequence of the size of the money supply versus the supply of goods and services. His thinking is synopsised in FRIEDMAN.

Interest Rates:

Interest rates broke out of a 38-year-long downtrend in 2020, as Figure 4 shows. The resulting uptrend has now extended for nearly four years, as Figure 5 shows, a persistent trend. The particular rate shown in both charts is the 10-year Federal Bond rate, considered to be the foundation for mortgage rates and similar long-term loan contracts and thus of considerable importance. Of course, linear trends often reverse so the question is whether that is likely in the near future. On this point, the answer is no if changes in the money supply are taken as the primary causal driver.

Figure 4: Weekly Plot of the 10-year Federal Bond Interest Rate Since 1995



Figure 5: Daily Plot of the 10-year Federal Bond Interest Rate Since Summer 2020

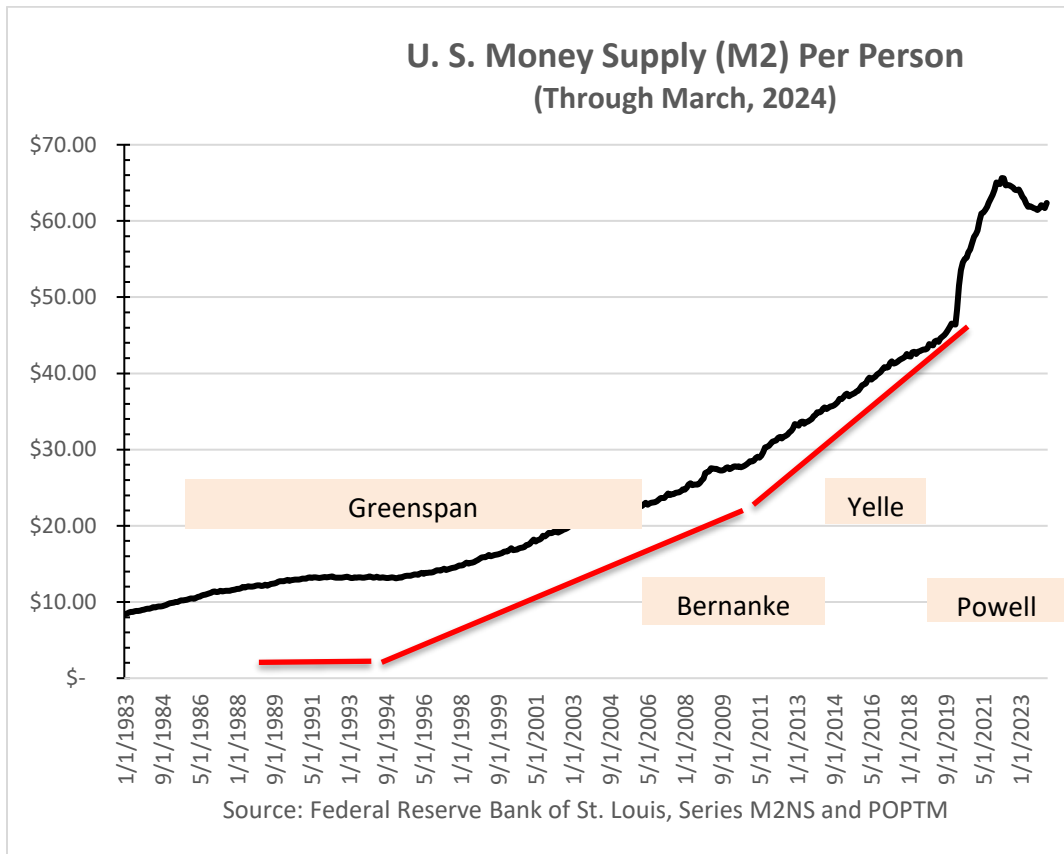


Money Supply:

Figure 6 shows the money supply as it relates to population. Efforts to relate the size of the money supply to gross national product (GDP) have not had the explanatory power desired. One problem is that the variables are non-recursive. The difficulty lies with the government spending component (G) of the GDP model, which is specified as being equal to the sum of consumer spending (C), plus investment (I), plus government spending (G), plus net exports (X-M). Substituting the size of the population for GDP obviates this problem.

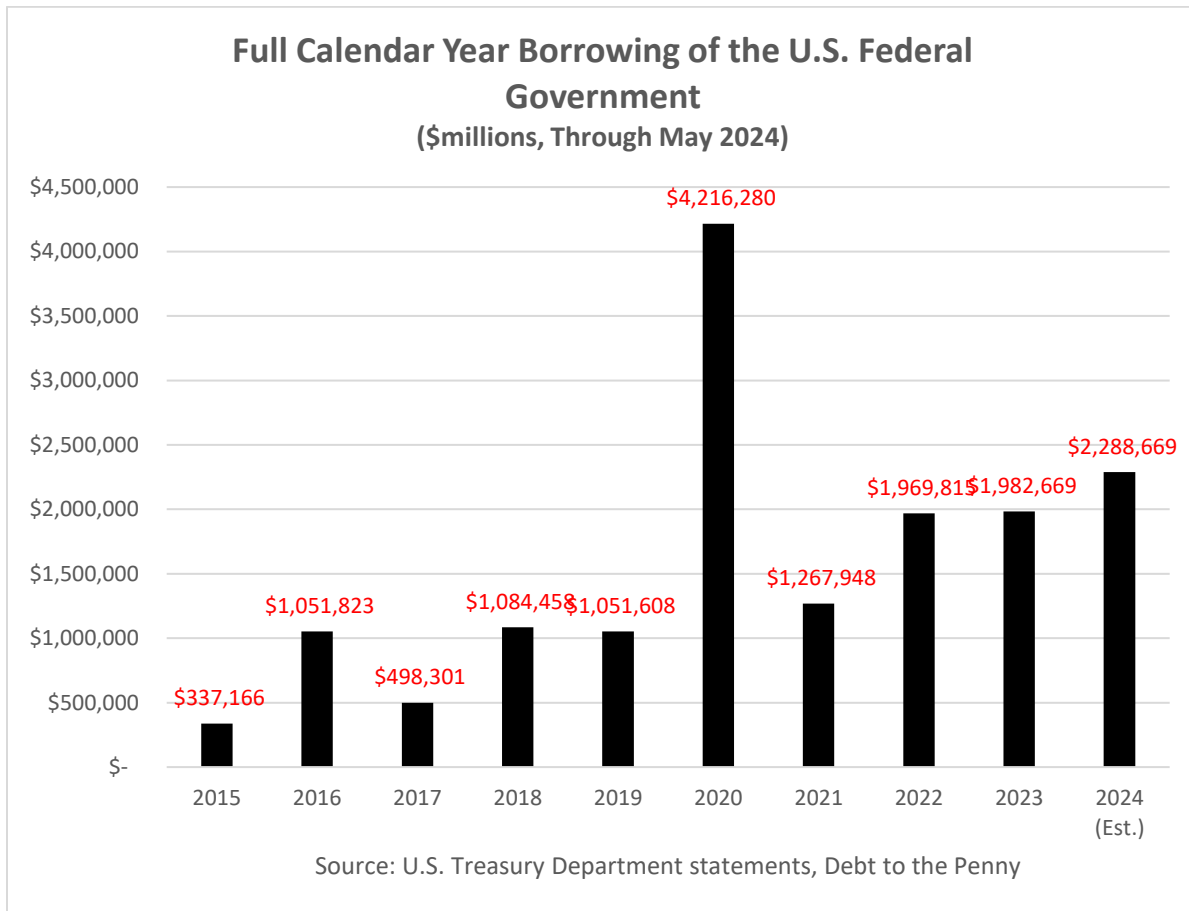
The result, as shown in Figure 6, is eye-opening. Beginning with Allen Greenspan the per capita money supply had been stable for a few years. Then it began accelerating at increasing rates under Greenspan and subsequent Federal Reserve Board (FED) chairs. But, what stands out is the explosion in the money supply that began in 2020 and then accelerated in 2021 and will continue accelerating through 2024. While the FED has a variety of tools available, it must accommodate the size of the Treasury's spending needs by expanding the money supply to meet them.

Figure 6: Money Supply on a Per Capita Basis Since 1983



What does that portend? Figure 7 shows the budget deficit results in terms of how much money the Treasury Department has had to raise each year to fund them. The dollar figures are the changes in debt owed to the public each year collected from monthly Treasury statements (TREASURY 1). The \$4.22 trillion borrowed in 2020 really stands out, but there has been a steady expansion of borrowings since then, necessitated by budget deficits that have increased steadily.

Figure 7: U.S. Treasury Borrowing Since 2015



Projections and Conclusions

Assuming current conditions continue, the money supply will continue to expand, putting additional pressure on prices for goods and services and thus continuing the increases in measured inflation rates. Similarly, the expanding and expansive borrowing needs of the Federal Government will put additional pressure on debt markets and raise interest rates further, independent of lenders' needs to obtain higher real rates of return as inflation rates expand. The implications for the demand for durable goods are obvious. Without a change in the ground conditions, interest and inflation rates are slated to continue rising further. As noted above, marketing firms' responses to those will have to become more ubiquitous, develop further nuance and power, incur higher costs, and suffer reduced profitability. These may become more difficult to execute. Higher interest rates and firm capital costs imply that the internal hurdle rates for new projects, such as for new product development initiatives, product line revamps, market communications campaigns, and the like will rise, and funding for such projects will become more difficult as they are required to achieve higher hurdle rates.

Government policy is at the root of all this. Without a sea change in politics, increasing budget deficits are likely. A return to fiscal probity is the apparent cure, but calculating the probability that it will occur is problematic. A shift of economic conditions into recession, long predicted but not yet happening to a substantial degree, might temporarily reduce prices and rates. However,

the effects would depend on the recession's depth and temporal extent. A recession would temporarily mask the effects of the fundamental driver, government fiscal policy, but not eliminate them. Returning to more normal conditions would again lead to higher inflation and interest rates.

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Track: Marketing Strategy

ID#: 1768

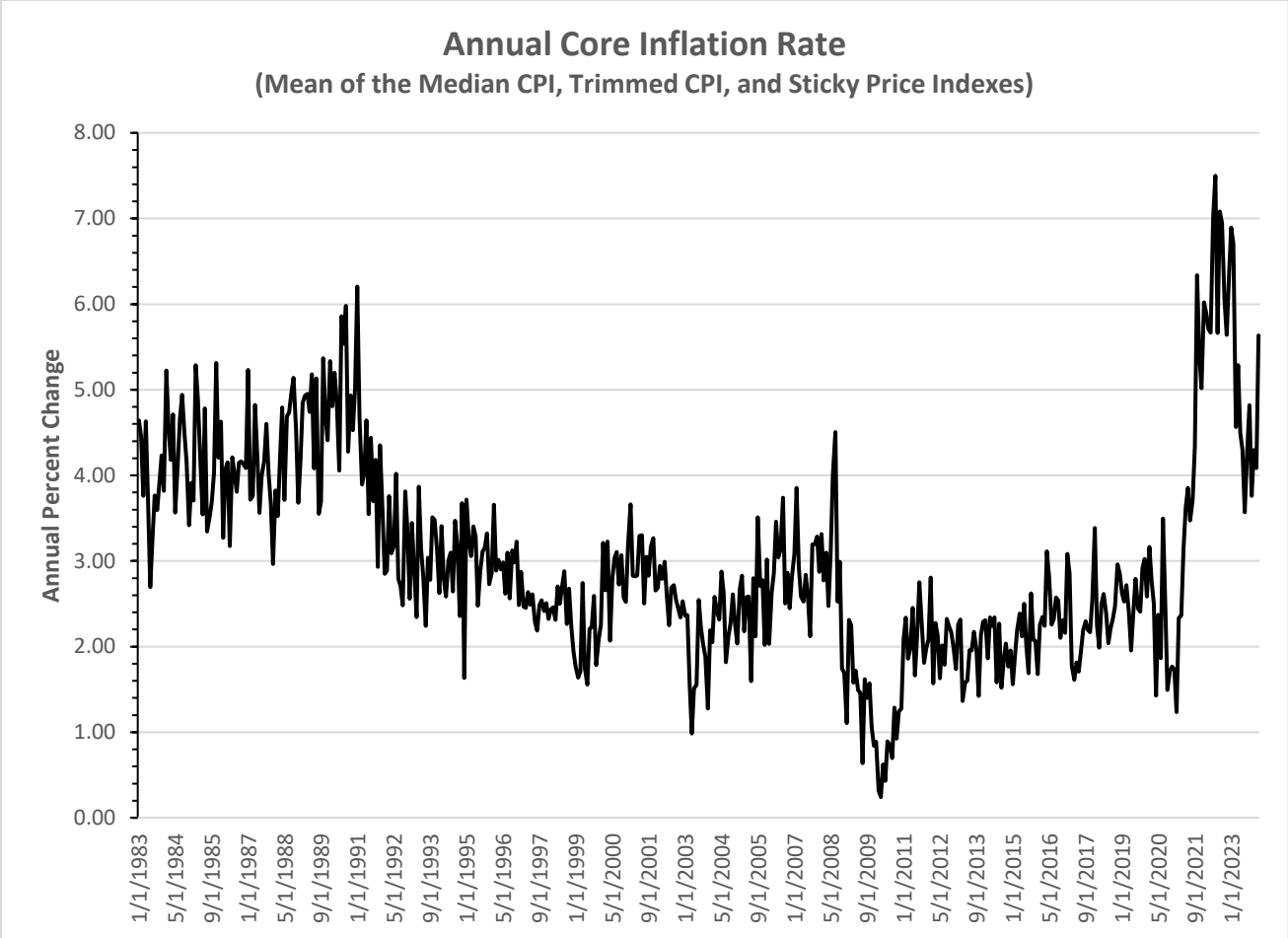
Inflation Rates Will Rise

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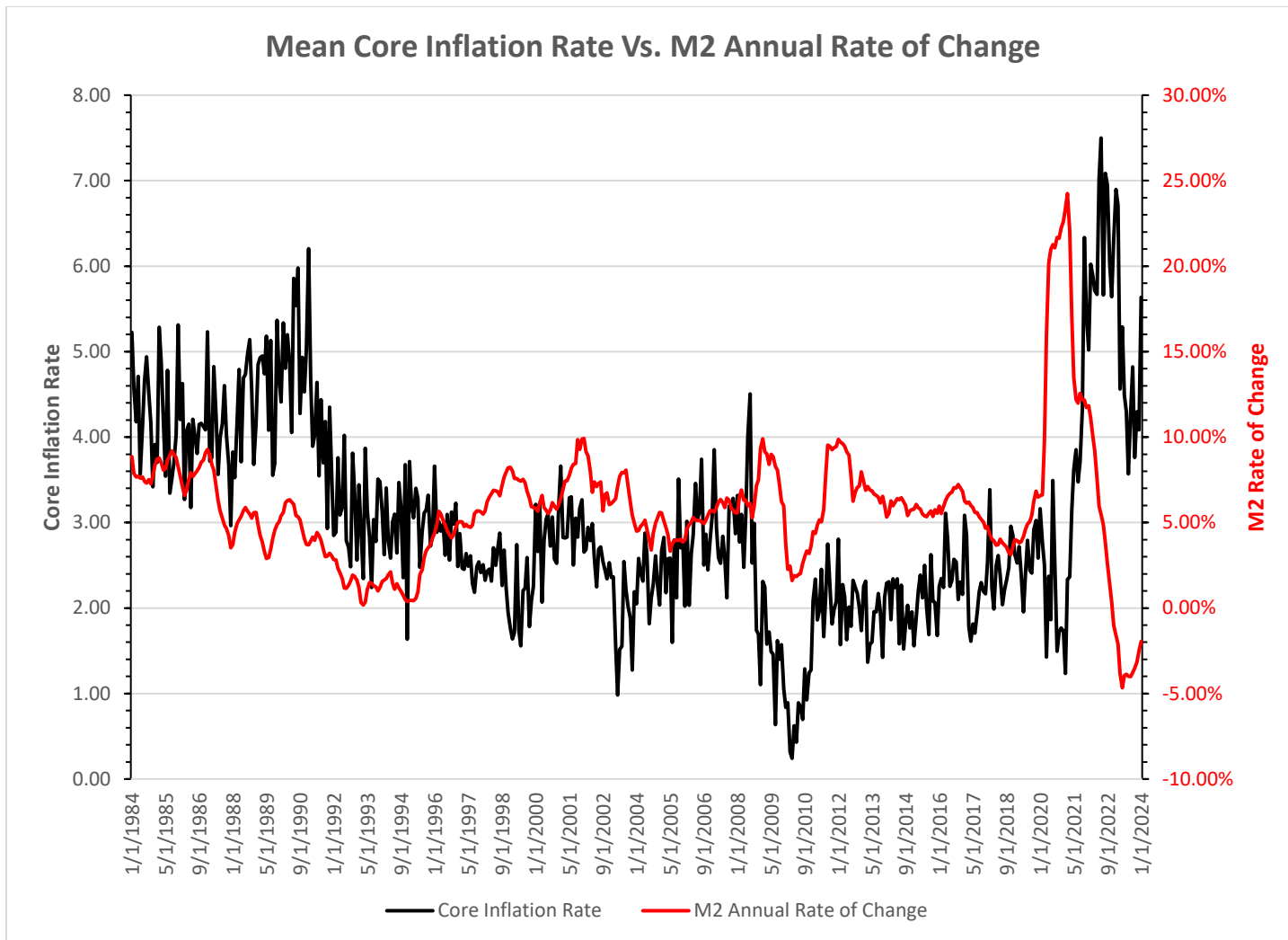
Recent upticks in inflation rates have not perturbed stock market bulls who continue to assert that the inflation fight has been won and that the Federal Reserve will begin to cut interest rates soon. The Bulls are likely to be disappointed. The recent upticks will continue and may gather force for a simple reason. The U.S. Federal government cannot resist spending way beyond its means. Rising deficits will have to be financed, and the Federal Reserve, like it or not, will monetize them. Resulting surges in the money supply will be a tailwind for inflation. Let's look at that, but revisit what is happening to inflation first.

One of the problems in grappling with inflation is how it is measured. The most common measure used and discussed, the consumer price index for all urban workers (CPI-U), can be volatile as it incorporates items like gasoline and food that change in price rapidly. Alternative indexes, such as personal consumption expenditures (PCE), attempt to get around that problem and measure what is called 'core' inflation on the argument that it is more likely to persist (either up or down) and is a better measure for purposes of setting monetary policy. And there are a variety of sub-indexes such as the PCEs which measures only prices for services. It can become confusing to settle on what is the best measure to use at any given time. One approach to resolving this is to combine measures of less volatile and more persistent indexes.

The Federal Reserve Bank of Cleveland publishes two such indexes, the Median CPI and the 16% Trimmed CPI, which are intended to provide a better signal of underlying inflation. The Federal Reserve Bank of Atlanta publishes a sticky prices index, the Sticky-Price CPI, which has a similar goal. Rather than debate the merits of one index or another, we can calculate an average of the three. When plotted the result looks like this:



For most of the time, inflation has been quiescent, ranging between roughly two percent and three percent per year from the early 1990s through 2020. Inflation exploded in 2020 with the rate zoom climbing during the COVID years. Supply constraints created by disastrous government policies certainly played a role in this. The reversal of those policies has eased inflation pressures, but there is another factor revealed in the chart below – money supply.

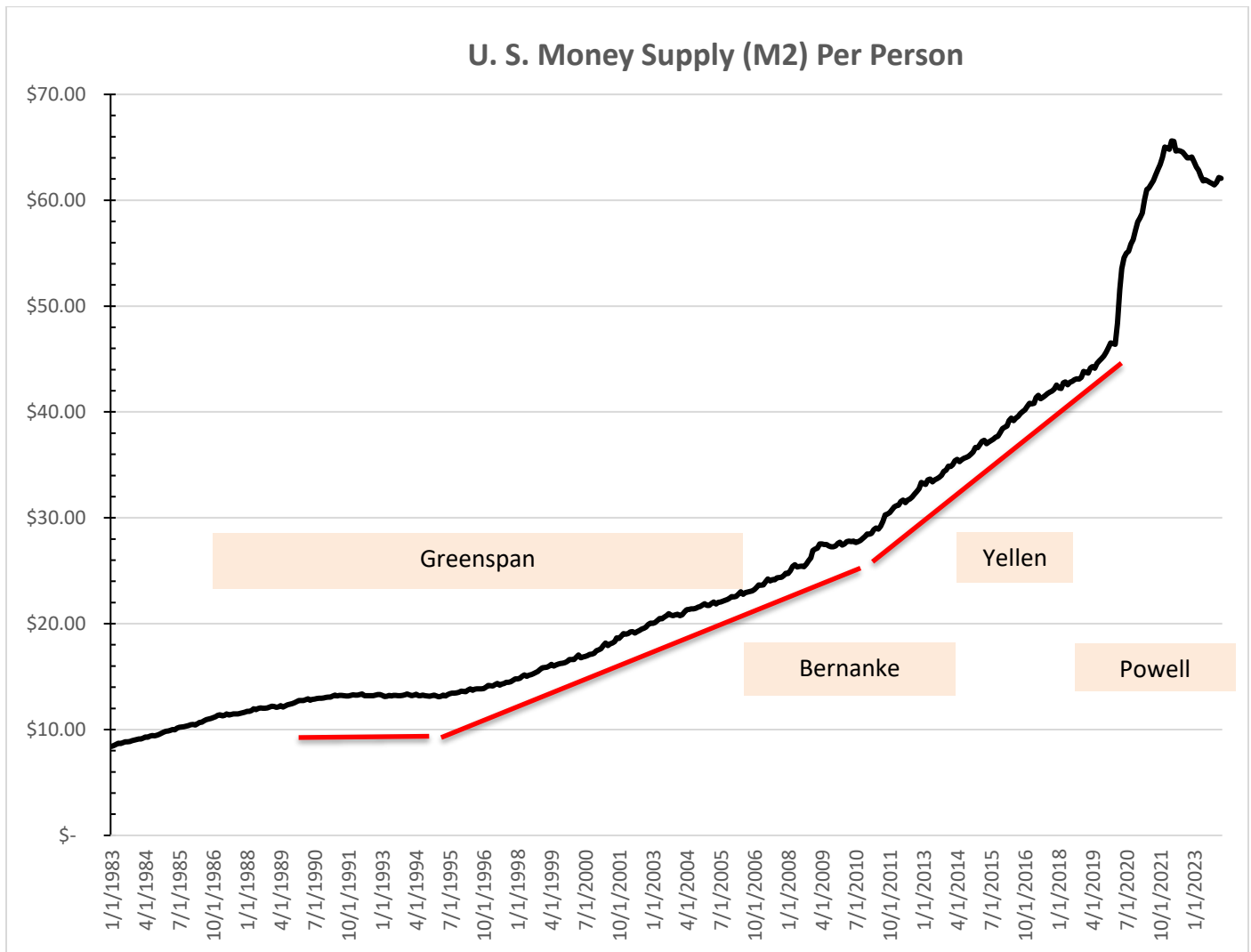


The money supply, as measured by M2, exploded as the Federal Reserve was forced to monetize the huge budget deficits of the COVID years. M2 expanded between the early 1990s and 2020 at roughly 3% per year, and often less, while inflation remained relatively low. The explosion in the money supply that began in 2020 led to the subsequent explosion in inflation, leading by approximately a year. Put simply, a lot more money began chasing a lot less goods. Remember what happened to used-car prices during this period?

Another way of looking at this is to relate the size of the money supply to some measure of economic scope. After all, if the economy is growing the money supply should be expanding to accommodate that. The problem becomes one of finding a good measure of economic scope to use. Using gross domestic product (GDP) has issues. One of the four additive components of GDP is government spending (G). But it is government spending, fueled by deficit spending, that necessitates expansion of the money supply.

An alternative is to relate the size of the money supply to the size of the population. During the time covered here, the U.S. population grew from 233,398,000 to 336,194,000. Gross domestic product can be conceived as the product of the number of people multiplied by the average economic output per person. The size of the economy expands as the population expands; other

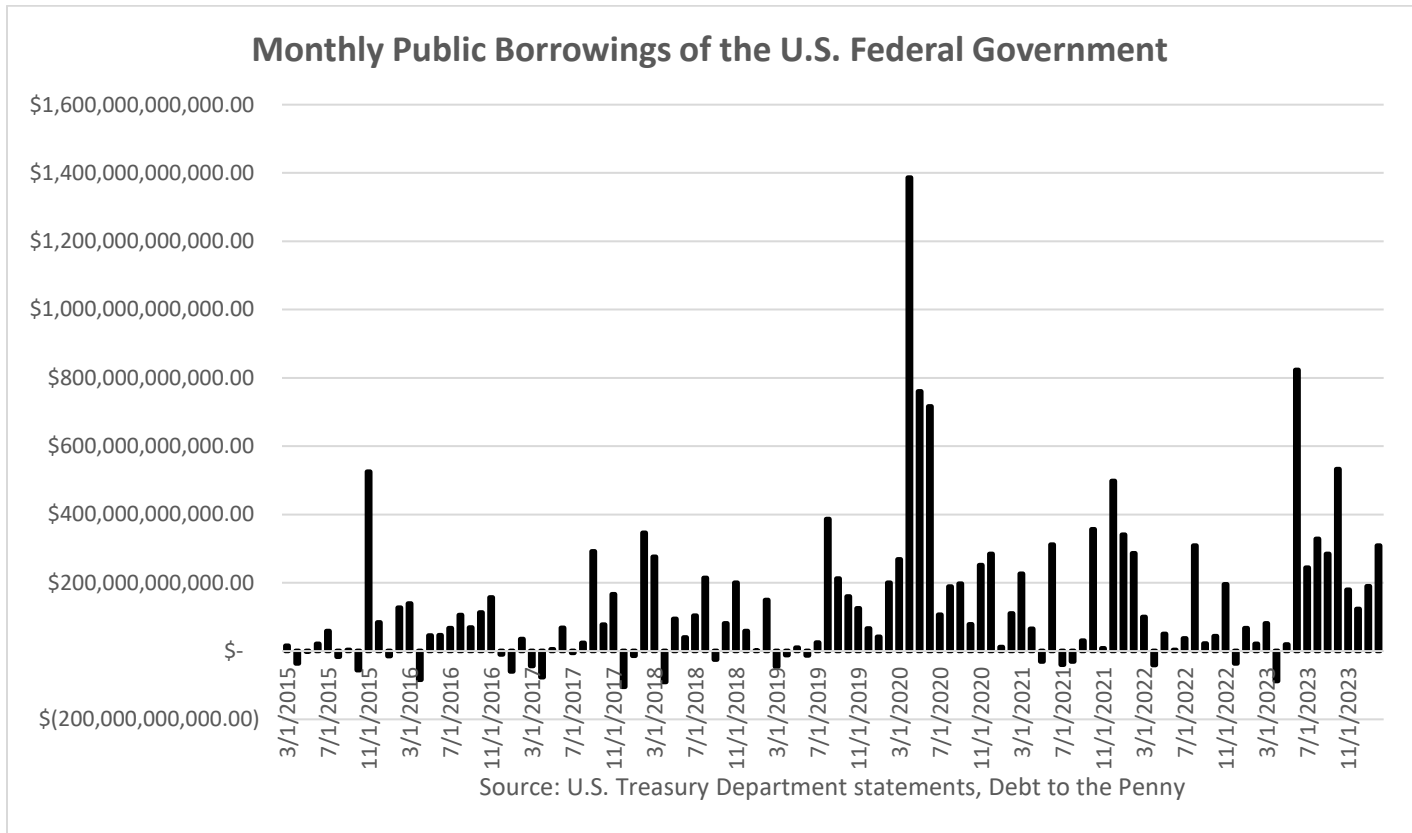
things equal. As long as the money supply expands at the same rate as the population, inflation should not result. As the next chart shows money supply has expanded faster than the population in most years with a sharp acceleration during Covid.

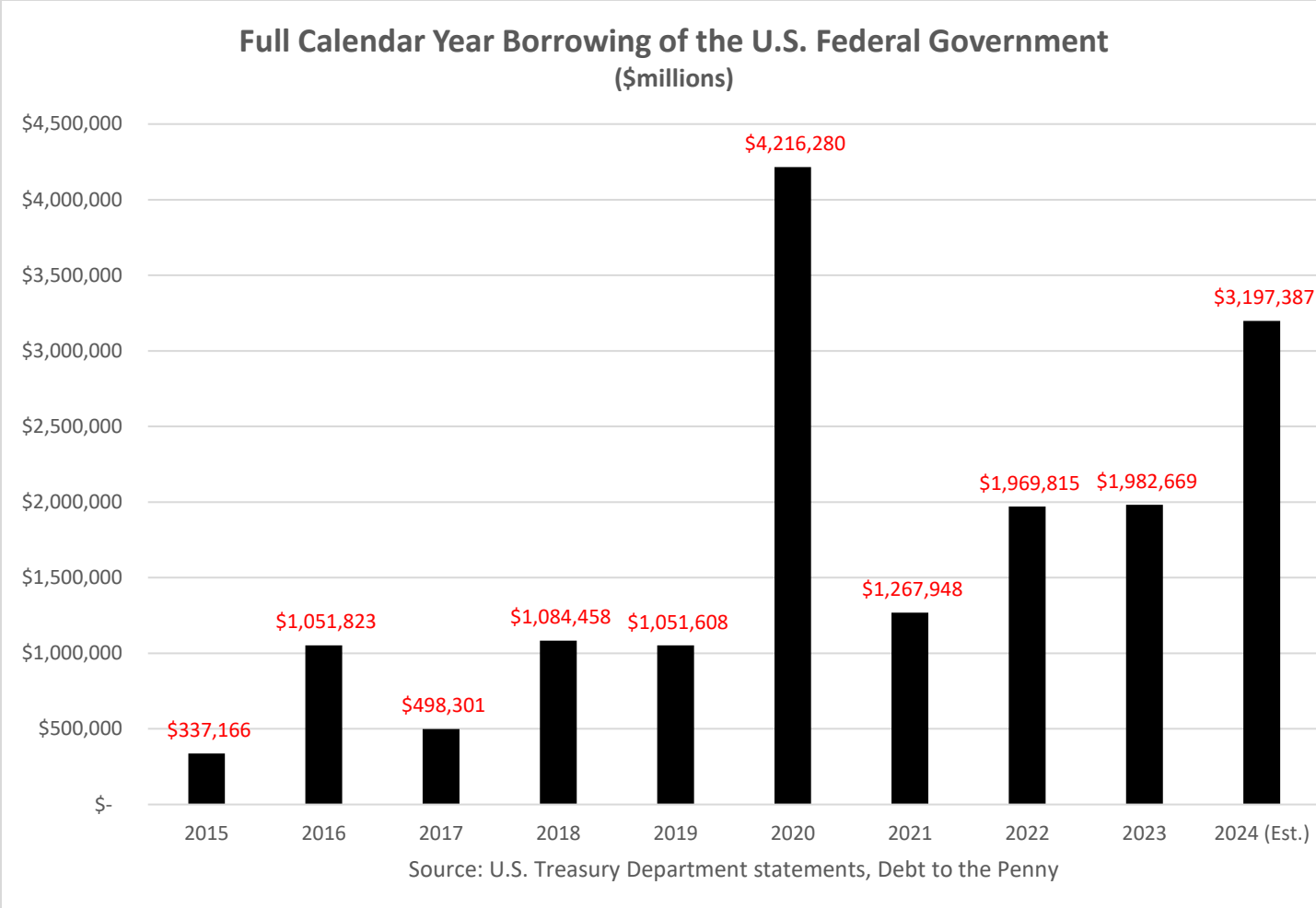


The stability of the money supply per capita in the early 1990s coincided with slow declines in concurrent inflation rates. Beginning during Alan Greenspan’s term M2 per capita began growing at a nearly constant rate and the inflation rate began rising. The rate of growth accelerated under Ben Bernanke and Janet Yellen and then zoom-climbed under Powell going from \$46 to \$65 per capita in only 26 months. The result, at least in part, was the rapidly galloping inflation of the COVID years. After the peak at \$65.61 in March 2022 there was a slight decline in the money supply which bottomed out at \$61.46 per person in October 2023. The slight expansion that followed has been accompanied by a re-acceleration in the inflation rate. The question, of course, is what happens next. Will the uptick in inflation continue? To answer that a look at Federal borrowing is needed.

Budget deficits drive borrowing needs which are easy to measure by downloading the Treasury

Department's monthly statements of the public debt and calculating the month-to-month changes. For the last eight years, those borrowings, monthly, are shown in the next graph. There were a few months when Federal debt declined, with the drawdowns ranging from a little over \$5 billion to a bit over \$104 billion. From 2015 through 2019 monthly borrowing changes remained comparatively subdued (if it can be called that), averaging a little over \$75 billion a month. Borrowings exploded in April of 2020 when they hit \$1,387 billion. Borrowings would continue at levels of \$760 billion and \$716 billion for the next two months. What is noticeable is the heavier borrowings that began in 2023. The effect of this is more visible in the chart of annual borrowings which follows. Note that the numbers are for calendar years, not Federal budget years.

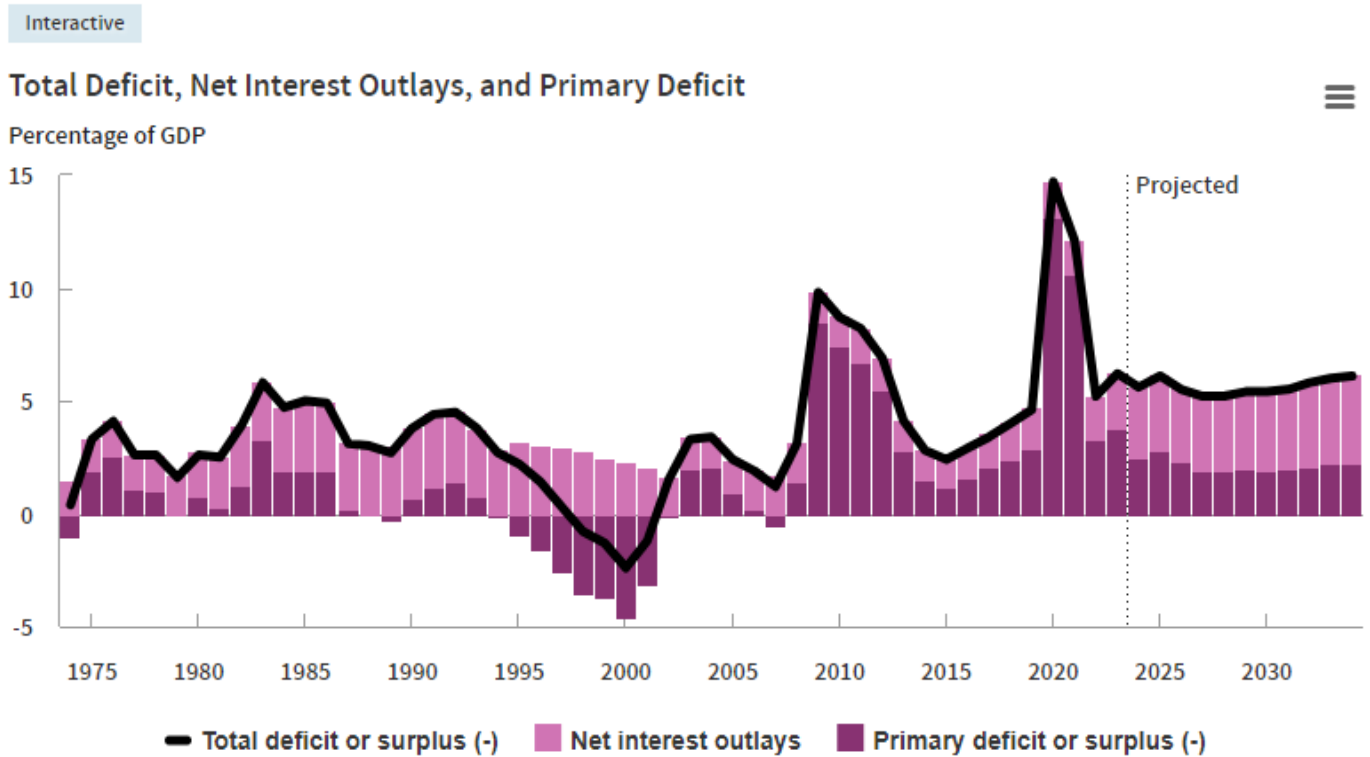




Looking at the graph there is little wonder why the money supply exploded in 2020. The Treasury was forced to borrow \$7.454 trillion from 2020 through 2022 to fund the budget deficits that began under Trump and continued under Biden. To avoid driving interest rates through the roof the Federal Reserve monetized \$3.329 trillion of the borrowings thus required. Chairman Powell has been criticized in some circles for expanding the money supply so rapidly, but in truth, he had little choice. His hand was forced by a profligate president and a profligate Congress that could not resist showering the country with money.

That's all a matter of history. It is what is to come that should concern us. Look at what has happened in the five months between July 2023 and February 2024. Borrowings have come in between \$123 billion and \$532 billion, averaging \$266.45 billion monthly. If monthly borrowing after February continues to occur at that rate for the remainder of the calendar year the total for the year will come to \$3,197 billion. Chairman Powell will have little choice but to monetize large portions of the debt once again. The result will be an acceleration of money supply growth and an acceleration of the inflation rate. A rediscovery of fiscal probity in an election year, when politicians of all stripes like to shower voter groups with money, is extremely unlikely. The only real question is how large the deficits and borrowings will become and therefore how large the monetary pressure on prices for all things will be.

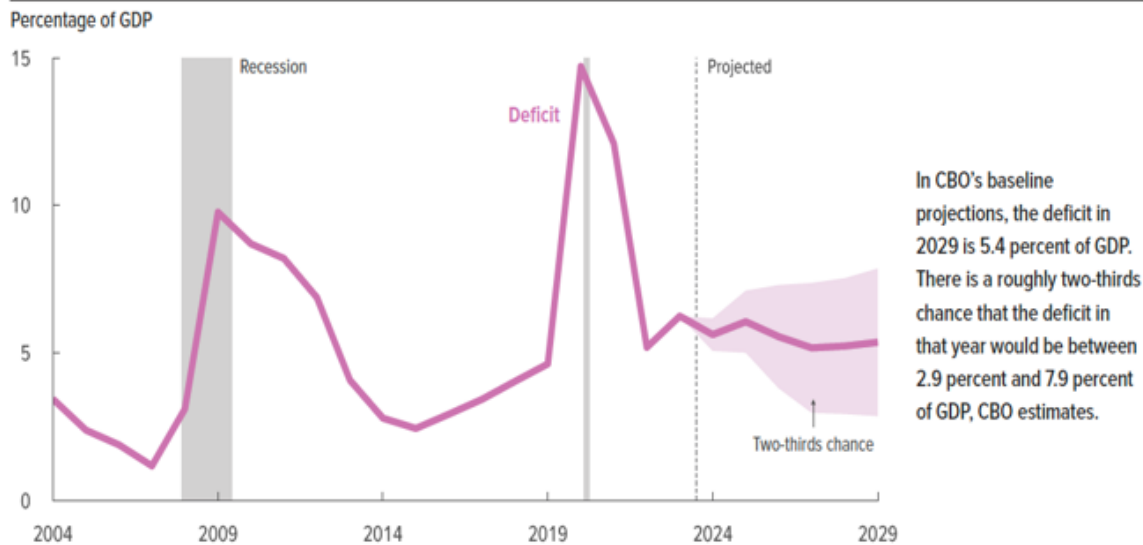
One gauge of the future is the Congressional Budget Office (CBO) projections for budget deficits for 2024 through 2034 released on February 7 this year. In it, one can find this graph:



CBO chose to present projected deficits as percentages of Gross Domestic Product, perhaps to make the illustration less frightening. But those percentages translate to deficits of \$1,600 billion in 2024, \$1,800 billion in 2025, and \$1,600 billion in 2027, thereafter rising to \$2,600 billion by 2034. Note that CBO's projection for 2024 is less than half of what calendar 2024's deficit (\$3,197 billion) could be, although one should note that CBO projects in terms of budget years rather than calendar years. CBO did assess the uncertainties underlying their projections as the next graph shows. There is a considerable range which widens as time passes. Given the proclivities of the actors in Washington who control the budget, it seems more likely that future deficits will be in the higher parts of the range than in the lower parts.

Figure 1-7.

Uncertainty of CBO's Baseline Projections of the Budget Deficit



Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

In sum, it seems that:

- Budget deficits will rise for the foreseeable future. The only uncertainty is how much larger they will be.
- The Treasury Department will have to borrow increasingly heavily to roll over increasing public debt that cannot be repaid from receipts.
- In addition the Treasury Department will have to borrow heavily to fund the additional debt needed every year to close yawning budget deficits.
- The Federal Reserve will have to either monetize the increasing debt or allow interest rates to rise as bond market participants contend with floods of new Federal paper.
- The current level of interest paid (over \$1,000 billion) each year is already putting severe stress on the Federal budget. Higher payment rates will force unpleasant choices on all other expenditure categories.
- And this does not begin to account for the need to fund increasing outlays for mandated income transfer programs such as Social Security, Medicare, or Medicaid with their enormous (approximately \$75 trillion) actuarial debt balances.
- The best bet, therefore, is that the Federal Reserve will be forced to increasingly monetize Federal debts.
- The money supply (M2) will increase in absolute and relative (to population) terms and inflation along with it.

It seems likely that the recent uptick in inflation (see the first graph again) will continue. There are, of course, forces that could act to change inflation rates. Policy changes could act to raise the supply of goods and services. A recession would reduce demand pressures and thus prices for goods and services. Artificial intelligence applications may generate productivity increases. The list goes on. The underlying trend, however, will be up. The prime mover in this is increasing

government borrowing and forced increases in the money supply. These threaten to swamp all other forces.

It looks like inflation will have a stiff government tailwind.

Track: Marketing Strategy

ID#: 1750

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Collective Enactment of Myth: The Case of D&D

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INTRODUCTION

Keywords: Game Playing, Identity, Mythology.

Relevance to Marketing Educators, Researchers and/or Practitioners: We examine game playing as an influence in consumer identity formation, hence this project provides insight into the dynamics of individual identity among D&D players, the identity formed as a group of players over a long-term campaign, and the influence of marketer-generated materials surrounding game production.

Games occupy a unique history for simulating human interactions (Peterson 2012) including war and other forms of interpersonal competition; and represent an under researched area within entertainment marketing and consumer behavior. Tabletop games specifically have held a unique and significant place in the realm of recreational activities, offering players a blend of strategy, chance, and social interaction. For example, chess has a sixteen-century history but continues to be played competitively today and Go is thought to have a history of four thousand years. Modern iterations of tabletop games range from classic board games, such as Monopoly and Risk, to complex strategy games, such as Settlers of Catan and Carcassonne. The resurgence of interest in tabletop games in recent years can be attributed to their ability to foster face-to-face interactions, promote cognitive skills, and provide a sense of community among players.

Among the myriad of tabletop games, role-playing games (RPGs) offer a unique approach to gameplay. Unlike traditional board games, RPGs emphasize storytelling, character development, and immersive world-building. Players assume the roles of characters within a specific fictional setting, collaborating to navigate through adventures orchestrated by a game master. The role-playing genre taps into the human desire for narrative and creativity, allowing players to explore new identities, scenarios, and conflict in a shared and imaginative environment (Waskul and Lust 2004). Dungeons & Dragons (D&D), a pioneer within tabletop role-playing games, has become synonymous with role-playing games since its inception in 1974. Created by Gary Gygax and Dave Arneson, D&D introduced a structured framework for fantasy role-playing that has influenced countless other tabletop role-playing games. Since its creation, D&D has not only maintained its popularity but has also experienced a renaissance, driven by recent mainstream exposure through television shows, podcasts, and online streaming platforms. This renewed interest in D&D highlights its ability to adapt to a more contemporary cultural landscape while maintaining its core subculture of dedicated fans.

From a consumer culture perspective, D&D's appeal extends beyond the gameplay; it represents a vibrant and dedicated subculture of consumption (Schouten and McAlexander 1995) that is bound together by a shared subcultural ethos, a formalized transformation of self, and a deep connection to the D&D game. Within this brand community (Muñiz and O'Guinn 2001), group

identities are fostered through roleplaying interactions, collaborative storytelling, and the collective creation and enactment of a rich, shared mythology. Dedication to the D&D game brand, in addition to the game publisher—Wizards of the Coast—mimic the dedication of community members found by Muñiz and O’Guinn (2001), Schouten and McAlexander (1995), and Muñiz and Schau (2005). Further, the social dynamics of D&D groups provide fertile ground for exploring concepts of group identity and subcultural dedication, some of which may challenge mainstream social norms (Kozinets 2001). Group identity within D&D is further reinforced by brand communication and the cultivation of a unique subcultural lexicon that signals group membership (Friendly and Glucksberg 1970). Players engage with the game through various media, including official rulebooks, supplements, and online forums, which serve as conduits for brand messaging and community building. The language and rituals associated with D&D, such as character sheets, dice rolls, and in-game jargon, contribute to a sense of both belonging within the D&D community and distinction from the broader tabletop gaming community. This subcultural identity is not only shaped by the game's creators, but also by the players themselves, who bring their diverse perspectives, creativity, and behaviors to the table. Hence this identity contains both an explicitly commercial element and an interpretive, improvisational, and localized element.

This paper uses qualitative ethnographic methods, including interviews and participant observation, to examine the motivations, experiences, and social dynamics that drive D&D players’ engagement with the game. By capturing the voices and experiences of these individuals, this study seeks to uncover the nuances of their relationship with the game and their fellow players. The purpose of this investigation informs a set of research questions intended to investigate the ways in which D&D players navigate their social interactions, form bonds with other players, and integrate the game and their characters into their broader sense of self. Specifically, we examine the nature of hierarchies that exist in the D&D subculture, the relationships between personal identity and character identity, and the nature of ingroup/outgroup distinctions among this potentially-stigmatized player group. It is important to emphasize that this social interplay operates within a larger context of marketer-generated materials. We believe this investigation provides insight into understanding of consumer behavior within niche subcultures and the role of brand communication in shaping group identities.

Literature review

We examine marketing and consumer behavior literature surrounding major topics that contributed to our theoretical understanding of the D&D subculture. First, since that the overall topic is game play, we suggest that previous research on group dynamics within leisure consumption subcultures may operate in the D&D subculture. Second, we examine research on player engagement and expression. Finally, we address development of identity within a subculture of consumption influenced by marketer-produced and explicitly commercial images and messages.

Group Dynamics within Leisure Consumption Communities

Consumer literature has examined the significance of group dynamics and hierarchies in brand communities. Specifically, how consumer subcultures form and function, emphasizing that consumers often form close-knit groups where status and hierarchy are influenced by knowledge, experience, and contributions (Schouten and McAlexander, 1995). These hierarchies

significantly impact social interactions and the perception of marketer-generated materials within the community. Similarly, Kozinets (2001) offered a broader perspective on subcultural dynamics by studying Star Trek fandom, highlighting that such subcultures often serve as a sanctuary for those who feel alienated from mainstream society. This is relevant to D&D communities, where similar patterns of social cohesion and mutual support are observed. As part of his analysis, Kozinets emphasizes the importance of shared narratives and collective identities in fostering a sense of belonging and legitimacy among fans (Kozinets, 2001). Unlike outgroup community participants such as motorcycle riders or Star Trek fans, Westborg and Bowman (2024) identify that group dynamics are essential for creating meaningful tabletop experiences and notes tabletop players are influenced by non-player characters, monsters, villains, and the game master's storytelling, which collectively shape character development and social interactions within the game. This collaborative aspect underscores the importance of relationships and hierarchies, where each player's role and status within the group contribute to the overall gaming experience.

Player Engagement/Expression

Unlike many types of tabletop games, tabletop role-playing games provide a unique platform for players to explore various aspects of their personalities and creativity through the development of their character. Central aspects of the character's personality, skills, or other traits may be chosen by players in consonance to or contradistinction with the player's personality, skills, or traits. In this way, the character may resemble the player characteristics or may even overcome perceived weaknesses of the player. Hence, playing D&D is not only a form of entertainment but also a method for players to express different facets of their identity (Westborg and Bowman, 2024). Players become more devoted to the game, strengthening their engagement, leading to significant emotional investment and active participation in game-related activities (Thorne, 2011).

Identity

The concept of the extended self, where possessions and virtual identities become integral to one's self-concept, is particularly relevant in the context of D&D (Belk, 1988; Belk, 2013). In D&D, character sheets, dice, and other paraphernalia are not merely tools for play but cherished extensions of the players' identities. Game items, along with digital avatars and online community interactions, contribute to a multifaceted identity that blends the real and the virtual (Belk, 1988; Belk, 2013). Consumers incorporate loved objects, such as game items, into their identity narratives Ahuvia (2005). For D&D players, characters and game-related items often become deeply intertwined with their personal identities, enhancing their connection to the game and community. Identity formation through narrative and material possessions is a consistent theme across the literature.

Marketer-Role

Media representations play a crucial role in shaping public perceptions and fan identities. Mainstream media positive portrayals have significantly influenced D&D's popularity, creating opportunities for marketers to engage with a broader audience and reinforce the identities of existing players through targeted campaigns (Sidhu, 2020). Marketers can utilize consumer devotion measurements that identify key indicators of high engagement and emotional attachment to craft messages that resonate deeply with consumers. Such campaigns are likely to

be well-received by devoted consumers, fostering deeper engagement and loyalty (Ortiz, 2014). Thorne (2011) emphasizes the importance of targeting different levels of fan engagement. By recognizing the varying degrees of devotion within the D&D community, marketers can tailor their strategies to address the specific needs and interests of casual fans, dedicated players, and the most devoted enthusiasts. This approach ensures that marketing efforts are relevant and impactful, fostering deeper connections with the audience (Thorne, 2011).

Methodology

This study began as an independent study during the fall of 2023 and data collection and analysis continued throughout the spring and early summer of 2024. Qualitative ethnographic methods consistent with practice in Consumer Culture Theory and interpretive consumer behavior were used, including depth interviews among members of the D&D subculture of consumption and participant observation of gameplay. The first author, an avid D&D player and game master, conducted the interviews while the second author served as a touchpoint to guide theoretical development. The second author's spouse is an active D&D player who has hosted D&D games and other events. Depth interviews used an IRB-approved interview guide, and were audio-recorded and transcribed, resulting in approximately 150 single-spaced pages of transcribed text. Field notes began with a historical description of the first author's D&D experiences and were used to capture subsequent significant events surrounding D&D play as soon after the events as practical.

The initial group of informants was selected based on a convenience sample of the first author's D&D contacts, then subsequent informants emerged based on recommendations of the initial group, resulting in a snowball sample. The first author also conducted informal interviews with game store employees and owners when possible, in order to gain a broader perspective of the D&D community. In total, 13 depth interviews were conducted. Interviews lasted between 30 and 45 minutes, and took place in locations convenient for informants, including locations on a college campus, homes of players, and a local game store.

Analysis of data was conducted using Thompson's (1997) hermeneutic approach. Interviews were coded based on a priori and emergent conceptual categories, then those categories were discussed iteratively by the authors to derive a theoretically-informed interpretation of the D&D subculture. Discussions took place both in person and virtually throughout the study, although they intensified during spring of 2024. Explanations were proposed by either author, discussed, and discarded when appropriate. The resulting explanation, described below in the results section below, resulted from this hermeneutic process.

Results:

Group Dynamics

Group dynamics in D&D is often experienced as a relationship between the players at the table. Players interact with each other for the benefit of the party and engage with the dungeon master as the authoritative figure in the game. Within these relationships, hierarchies develop, primarily based on game experience or character roles. Beginner players can be characterized as dilettante consumers (Thorne, 2011) with little experience with Dungeons & Dragons but have heard of the name through friends and family. After their first experience, these beginners move along a spectrum of fanaticism, eventually becoming dedicated fans. Often, experienced players shift

into the role of the dungeon master and become devoted fans of Dungeons & Dragons. For example, Brick, a mid 20's male who has been playing Dungeons & Dragons since college, finds the main group dynamic within the collaborative storytelling experience of the game.

It's really that mindset that I can do anything. It felt very story driven. That it was a – it was a – a collaborative storytelling experience. While my actions had impact, my actions were also influenced by the other players. My – it was kind of a create your own adventure story with your friends. (Brick, mid 20s male)

Brick also identifies the nature of in-character conflict as an element of group dynamic, suggesting group conflict as an indicator of natural progression. Brick also hints to characters adding group dynamic through integrating conflict as a characteristic of one's D&D character.

Typically, we like, keep [conflict] in character pretty well. Or we make it a part of the characters. So, like we've been doing a good job of communicating like where boundaries are, if needed. We haven't really had any issues so far when it comes to those in-party disagreements. Typically, I like to see them as just like a – a bump in the road, in terms of story like, 'Oh, this is the inner party conflict. This is the natural progression of the story. (Brick, mid 20s male)

Talesman, a late-teen male who has been playing Dungeons and Dragons for three years with his family, describes the group dynamics within the roles of character types at his table. Specifically, Talesman addresses how each role fits elements of Dungeons & Dragons. Namely, puzzle solving, exploration, and combat.

Our group is large enough that we have people dedicated for each of those [roles]. We have two combatants with, wait no, three combatants, which are me and my two brothers, we are the fighters. In my case, I'm a monk and the fighters are well, fighters. Then we have our puzzle solving and that sort of stuff, which is my mom, my aunt and my little sister – one of my little sisters. And then we have our exploration group, which is my – one of one more of my brother, one more of my sister and my cousin. And they make up the exploration, like they help us, like get us to where we need to go because they explore, their characters are more curious and outdoorsy. (Talesman)

Pathfinder, an early 20's male with a decade of experience in Pathfinder and Dungeons & Dragons, describes the group dynamic of character roles in the game. Specifically, creating a character to fill in a weakness of the party's abilities.

It's like a table full of fighters, mages, paladins, like, who's doing the technical work? And there's like, the sorcerer. I'm like, and he can do a whole lot with magic, but that's not solving technical problems because we're on a spaceship. So I was like, I will come in as an artificer who solves technical problems. (Pathfinder, early 20s male)

Player Engagement/Expression

Player engagement describes the player feeling towards the fantasy of Dungeons & Dragons. Typically, engagement is marked by the extent of player expression at the table, creating an immersive experience among the group. Players express their interests and style to immerse

themselves in the adventure. Dungeon masters utilize immersive tools, tips, and guidelines that foster immersive experience. Frequently, engagement tools are similar to rules or guidelines the dungeon masters follow. Variables such as session length, party size, and table behavior are factors that contribute to the level of player engagement at the table.

Forever DM, an early-20s male with experience in 5th edition Dungeons & Dragons, briefly describes an immersive technique he uses as a dungeon master for his players. This technique was inspired by a dungeon master for a popular live-play show of Dungeons & Dragons called Critical Role.

In combat, this is actually something that I take from Critical Role. Matt Mercer does a thing at the very end of combat. Whenever the big boss is defeated in whatever way he asks, “How do you want to do this?” And that lets the player themselves explain how they get the finisher move, how they use their spells, everything to flesh out the moment and it’s one of the most powerful tools I’ve seen out of any DM ever use. (Forever DM, early 20s male)

Brick recalls the engaging environment as a key piece of enjoyment in Dungeons & Dragons. He describes the moment in which all players have immersed themselves in the campaign, engaging with intense focus on the story.

I think it's that moment, it's that kind of moment where everybody is, like, simultaneously just engaged with what's happening. The – everybody's deep in character, everybody's like, immersed in the atmosphere, whether that – being that as a player and a DM, those are both like, moments to, I think, make the game. (Brick, early 20s male)

Pathfinder illustrates the use of physical materials for a tangible element in communicating the scene for players. Although he notes “theater-of-mind” is a valid experience, the use of physical materials for a scene as a dungeon master provides critical descriptive information to immerse the players.

So, as a dungeon master, yeah, you can run a theater of the mind where you're just imagining it all, which is fine for when you have really exotic locations, but it also takes away the descriptiveness that you can provide your players with because if they have a thing sitting in front of them that is a tavern, you don't have to describe the floor, the table, the wood, the atmosphere – you can see it right there, it's on the map. So, you can describe the stuff that's really in detail, what's behind the bar, what the barkeeper is like, what the atmosphere is emotionally, not just in the material. (Pathfinder, early 20s male)

Shoplad, a mid-20s male with experience in operating a game shop and experienced D&D player, identified his favorite moments as ones that were characterized by the intense engagement of all players at the table.

Memorable moments are normally when everyone is in that zone. Something tense could be happening, something emotional. Character deaths, character arcs, anything that has the players and the DM all invested in something. (Shoplad, mid 20s male)

He also recalls the magic of his first experience watching a group of people play Dungeons & Dragons for the first time that illustrates his fascination with player engagement.

How deeply entrenched everyone was in the story. It felt like everyone, obviously everyone knew, but it almost felt like everyone believed the story was happening. And it was so wonderfully told because everyone cared so greatly about it. (Shoplad, mid 20s male)

Character Identity

Brick highlights methods players use to embody their characters. By adopting distinct voices and speech patterns, players are able to differentiate their character's identity from their own and immerse themselves within the game. The effort to align speech patterns with character intelligence and personality demonstrates the players' commitment to creating a distinct character identity. This interaction showcases how personal identity is temporarily set aside to fully embrace the character's identity, revealing a complex interplay between the player's self-concept and the character they portray.

I always like to practice a voice. It kind of just helps me like, become the character. I kind of think of the voice as being part of the traits and whatnot. So if they're, if they're a big dumb brute I like to, kind of, I like to mispronounce words a little bit, but or like, use more compound words, as opposed to just like, speaking. Or if it's a smarter character, I'll take my time and I'll slow down my speech a little bit, enunciate more clearly. (Brick)

Brick further expands on the effort to embrace the character's identity through the development of their back story. These character backgrounds create a foundation for character personalities and behaviors.

That's like, that's like the small part of it. But that trait building, I like to just like, think about every aspect of the back story. Like, 'Who does this person know growing up, who does this? Where does this person come from?' I think the back story is a huge influence on who that character ends up being and that voice becomes. (Brick)

Shoplad further explains the importance of a foundation for a character, similar to Brick. In his experience, inherit traits established before the game contribute to the development of the character during in-game experiences. Characters are a collaborative development between the traits given by the player and the storytelling of the game master.

You have to take into consideration who they are at their base, if they're kind and caring, stern, loyal, whatever base traits you can use, and then build on that from their experiences from their past, what they're currently going through, and what they experience from people around them. That is what ultimately helps shape it, especially with the DM helping because they are running a story, so you're not just being influenced by your player companions as a player, you're being influenced by NPCs, by monsters, by villains, and that's what makes for what shapes everything together. (Shoplad)

Discussion:

We find that the study of D&D provides potential insight into the nature of consumer behavior that traditional studies of the topic neglect. First, the emphasis on leisure studies in general and game playing in particular provides a sense of how consumers interact in contexts that differ

from those traditionally studied within the literature on consumption communities. We find that players of D&D appreciate and enact mythological narratives in the context of game play. Further, they adhere to the significance of the enacted myths by staying in character even in situations that are characterized by potential conflicts. Collectively, however, this appreciation of myth takes place using creative influence by the players, in formation and adherence to their characters, and by the DM, who integrates chance through dice rolling in furtherance of improving the story and game playing experience. Importantly, however, this myth work operates in a commercial context using marketer-generated materials. The integration of Wizards of the Coast's materials into game play make expressions of the game operate at individual levels among players, group levels among the multi-day sequence of play, and commercial levels.

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Track: Music/Arts & Entertainment

ID#: 1806

PROFESSIONAL SALES/SALES MANAGEMENT

Track Chair

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Generative Artificial Intelligence in Professional Selling Course: The Art (and Science) of Prompt Engineering

BEST PAPER IN CONFERENCE

BEST PAPER in TRACK

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Abstract

As the adoption of Generative Artificial Intelligence (AI) gains momentum in both academic institutions and the business sector, the imperative for future sales professionals to harness technologies like ChatGPT is becoming increasingly pronounced within marketing curricula. This paper introduces an experiential learning innovation that empowers sales students to utilize Generative AI effectively within the sales process, focusing on the nuanced art of "prompt engineering." This technique involves crafting specific inputs to elicit desired outputs from an AI model. The authors detail a structured experiential learning exercise, highlighting how students were tasked with refining their prompts to achieve more precise outcomes in several stages of the sales process. This hands-on approach not only bridges the Theory-Practice Gap by grounding students in both the theoretical underpinnings and practical applications of Generative AI but also underscores the relevance of generative AI in the marketing curriculum. The collected student feedback reinforces the gains in understanding and applying Generative AI in sales, affirming the curriculum's role in equipping a future-ready salesforce. The paper concludes with insights into the ongoing integration of Generative AI into sales education, advocating for a curriculum that is both technologically advanced and practically oriented.

Keywords: Artificial Intelligence, Sales, Sales Process, Generative AI, Marketing, Sales, Prompt Engineering, Chat GPT

Relevance to Marketing Educators, Researchers, and/or Practitioners: The objective of the teaching innovation is to provide a learning experience that enables students to leverage Generative AI tools such as ChatGPT in sales education. The experiential learning exercise provides a dynamic learning experience which enables marketing educators to efficiently integrate Generative AI tools into sales education. The exercise also offers educators a unique and innovative approach to skill development for future sales leaders.

Track: Marketing Education/Experiential Learning

ID#: 1777

Insights on How to Align Sales Curriculum with the Modern Sales Environment

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In recent years, the field of sales education has experienced tremendous growth (Cummins et al., 2020; Spiller et al., 2020) and sales educators have correspondingly devoted greater attention to how we can deliver quality education as times change and programs expand (Peltier & Deeter-Schmelz, 2020). However, despite significant advancements in this area, ever-changing economic, technological, and generational dynamics, plus a global pandemic that has re-shaped how business is conducted, have created lags between the knowledge, skills, and abilities demanded by the market and what educational institutions are currently producing. In short, it appears that a gap has formed between what sales educators *are* teaching and what they *should* be teaching. To date, relatively scant research has been devoted to examining sales curricula from a macro perspective (we find just 11 articles that have even a partial focus on sales curriculum, of which, only four attempt to provide a comprehensive overview). Rather, much of the recent research published in sales pedagogy has focused on *how* we teach instead of *what* we teach. While research examining *how* we teach, is no doubt vital, the usefulness of these tactics and techniques is attenuated if they are being used to teach dated or irrelevant material.

Therefore, the purpose of the present research is to gain a clearer understanding of the current state of sales curricula and to glean insights on how sales curricula should be evolved. To accomplish these goals, we first review the curricula of University Sales Center Alliance (USCA) members. Next, we conduct focus groups with former sales students presently working in sales and sales managers/recruiters affiliated with university sales programs.

Curriculum Review Methodology

The first step of the present research was to gain a clear understanding of the current state of university sales curricula at large. Following Spiller et al. (2020) we reviewed the websites of the 70 current U.S.-based USCA members. Removing the similarly named (i.e., duplicate) courses, our study uncovered 71 unique sales courses being offered at USCA institutions.

Professional Selling, Sales Management, Advanced Sales, Negotiation, and Customer Relationship Management (CRM) were the five most frequently offered sales courses. The results of our review suggest that as much as the pandemic produced change within the actual sales profession over the past several years, the core sales education curriculum has remained largely unchanged (our review produced similar results as Deeter-Schmelz & Kennedy (2011) and Spiller et al. (2020)). However, looking more closely at the results we see a notable shift in the increased prominence of standalone CRM/sales technology courses. We also observe that there has been substantial development of new and unique sales courses recently, including sales courses aligned toward specific professions (e.g., Medical Device Sales, Selling Financial Services, Sports Sales).

Qualitative Data Methodology

After establishing the present state of sales curricula, the goal of the next phase of our research was to solicit insights on the perceived strengths (i.e., courses/content that should be retained), weaknesses (i.e., courses/content that should be eliminated or revised), and what is presently missing (i.e., courses/content that should be added) from the global sales curricula. We used focus groups to better understand how sales courses prepare graduates for sales careers. Three groups of participants were recruited: Group 1:12 former sales students who graduated less than three years prior and are currently working as sales professionals; Group 2:12 former sales students who graduated more than three years prior and are working as sales professionals; and Group 3:10 hiring personnel (mix of sales managers and recruiters) working for partnering companies at USCA affiliated sales programs. In line with recommendations on organizing focus groups (Krueger & Casey, 1994; Onwuegbuzie et al., 2009), all but one focus group consisted of three to four participants and lasted between 90-150 minutes. The focus groups were conducted using Zoom and were recorded to be transcribed later. Females represented 12 of the 31 participants (39%) in this study. The data collection was conducted over a four-month period.

The transcripts were initially reviewed by the researchers and then NVivo 11 software was used to further review and code the transcripts. Inductive coding was used as it was best suited for the analysis. Coders began by identifying three main categories from the transcript (e.g., Category 1: Key curriculum-related aspects that are necessary or beneficial for entering the sales profession, Category 2: Courses and content that have little impact or are extraneous for entering the sales profession, Category 3: Curriculum-related gaps or suggested improvements that can be done to benefit students entering the sales profession). Next, these categorized responses were combined into key themes emerging from the data, followed by a thorough discussion of these themes. We conducted a thematic analysis using the recommendations by Braun and Clarke (2006) for inductive coding. Ultimately, 17 themes emerged from the data (Category 1: 5 themes, Category 2: 4 themes, and Category 3: 8 themes).

Focus Group Findings

The major themes expressed by our respondents are summarized in Table 1, with illustrative quotes provided. Recently graduated alumni (less than three years of professional experience) indicated that their sales courses helped them to build confidence, understand the sales process, and learn to negotiate. However, they felt that some courses and concepts, including sales management, were extraneous, and also mentioned the need for more cold call training and better preparation for the challenges of the job that can take a mental toll. Sales alumni with more than three years of job experience echoed much of what their younger peers had said, but also shared some unique insights. They indicated that exposure to CRM/sales technology was especially helpful as they entered the sales profession, as were the collaborative learning experiences in their sales courses. However, they expressed that some topics, while touched upon, were not covered in enough depth (e.g., prospecting) and that having more involvement from active sales practitioners in the classroom would be advantageous. The older sales alums also suggested that more analytics be built into the sales curriculum and that more efforts to provide mentorship be created for students. Finally, hiring personnel offered some unique perspectives. Though the focus groups indicated broad support for affiliations with sales programs, the feedback provided tended to coalesce around the areas they perceive to be missing from the sales curricula. Of note, hiring personnel uniquely identified that sales students still exhibit deficiencies around

communication and soft skills, and relatedly, they need more work to learn how to sell authentically rather than just regurgitating sales scripts and talking points.

Discussion

The findings of our study reveal important insights for the continued improvement of the global sales curricula. Based on the feedback of former students, sales programs should continue to expand their focus on sales technology and should also give serious consideration to launching a course in sales negotiation. Students also shared that some of the more traditional sales courses, (e.g., sales management; key accounts) failed to teach them skills needed for entry-level sales positions. Universities could consider replacing these courses with others that would better develop “day one” skills, such as an outbound sales course. Industry experts indicated that student soft skills need better development. They suggested that greater emphasis needs to be placed on developing strong communication skills in tandem with more traditional training on executing the sales process.

Table 1. Categories of Curriculum Themes

<i>Category 1 (Benefits) Themes</i>	<i>Select (and condensed) Illustrative Quotes</i>	<i>Alumni ≤ 3 yrs.</i>	<i>Alumni > 3 yrs.</i>	<i>Hiring Personnel</i>
1-1. Building Confidence	<i>"It made me completely confident in going into sales calls because I knew I had done it so many times where I just felt so confident in myself."</i>	√		
1-2. CRM/Sales Technology	<i>"Definitely helped out in interviews...knowing how ___ CRM Software worked and why companies use it and how it's beneficial."</i>		√	
1-3. Collaborative Learning	<i>"Team-based assignments were challenging, but they taught me the importance of communication and teamwork, skills I use every day in my job now."</i>		√	
1-4. Steps of Sales Process	<i>"I still feel-felt-found the heck out of anything...real world applicable things."</i>	√	√	
1-5. Negotiation Training	<i>"It was very interesting for me to learn negotiation tactics. That has really helped me to have a leg up compared to my peers."</i>	√	√	
Category 2 (Challenges) Themes				
2-1. Exposure to Emerging Trends	<i>"(The) biggest trend that we see is social selling. And this is something that was kind of new to me when I got into the industry..."</i>	√		
2-2. Curriculum-Industry Alignment	<i>"We talk theoretically maybe a little bit about prospecting. But there's not much activity-based learning that goes into that aspect of it."</i>		√	
2-3. Industry Perspectives	<i>"Having more executives from different fields in the curriculum would kind of provide more insights about the industries..."</i>		√	
2-4. Relevance of Some Courses	<i>"I hate to say it but like Sales Management, I did not think was that beneficial... by the time we are sales leaders, we're not going to remember any of that..."</i>	√	√	
Category 3 (What to Add) Themes				
3-1. Cold Call Training	<i>"I feel like for the cold calling aspect because in class we learned about SPIN and closing deals but currently I'm not doing that yet so..."</i>	√		
3-2. Challenge of Career Transition	<i>"It's been unexpectedly difficult to hit my sales quota. This challenge was something I wasn't prepared for."</i>	√		
3-3. Need for Analytics	<i>"Sometimes I wish that I had taken more of our analytics courses."</i>		√	
3-4. More Expansive Sales Training	<i>"Could definitely focus on preparing for the initial call and seeing kind of just having to narrow it down, and also who to ask for in an organizational structure."</i>	√	√	
3-5. Selling w/ Authenticity	<i>"It takes time for them to be able to go beyond a script...or guide...listening and asking questions...we are selling to people and people are buying...not robots"</i>			√
3-6. Communication Skills	<i>"I'm seeing a big lack of the ability to have small interpersonal communication skills."</i>			√
3-7. Mental Health	<i>"The struggle, the grind of sales is real, right? And the stress that comes along with it."</i>	√		√
3-8. Mentorship	<i>"You could shadow a rep and just like get real-world experience like for a day..."</i>		√	√
3-9. Managing Relationships	<i>"I would say maintaining the customer relationship...I deal with a lot of RND accounts again where we try and kind of maintain the worldwide scope of their purchase..."</i>	√	√	√

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Track: Professional Sales/Sales Management
ID#: 1776

Counterproductive Work Behaviors to Cope with Person-Organization Misfit

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Abstract

A random sample of employees was surveyed to explore the effect of person-organization fit on counterproductive work behaviors. There was a significant negative relationship between person-organization fit and counterproductive work behaviors. A lack of person-organization fit may be construed by employees as a depletion of psychological resource. As the conservation of resources theory (Hobfoll, 1989) argues, it appears that employees may have replenished the loss of this psychological resource (person-organization fit) by engaging in counterproductive work behaviors. The findings have several implications for practitioners.

Keywords: Person-Organization Fit; Counterproductive Work Behaviors; Conservation Of Resources; Recruitment

Track: Professional Sales/Sales Management

ID#: 1796

Generative AI's (GenAI) Impact on Sales Performance: An Empirical Study on Business-to-Business Sales Process

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Abstract

The study examines business-to-business sales professionals' use of Generative AI (GenAI) within the sales process. Using data from a large U.S. firm., we empirically test the impact of upper management support and technology self-efficacy on the use of GenAI in the sales process, and the relationship between GenAI use and multiple forms of performance. The proposed research model is tested using 163 survey responses and analyzed using partial least squares (PLS) modeling. The results indicate that GenAI is positively related to sales process effectiveness, efficiency, and sales performance. Both theoretical and managerial implications are provided at the end of the study.

Keywords: Sales, Sales Process, Sales Performance, Artificial Intelligence, Generative AI.

Relevance to Marketing Educators, Researchers, and/or Practitioners - The research contributes to the literature on the impact of AI on sales performance, highlighting the value of GenAI in terms of sales effectiveness and administrative efficiency. It also addresses the research gap concerning the applications and benefits of GenAI in the sales domain, suggesting significant potential for GenAI to improve sales productivity and performance. The results show that utilizing GenAI can offer substantial benefits to the firm's salesforce, including enhanced sales processes and improved sales efficiency. The research provides empirical evidence that may reduce executive hesitation in adopting GenAI and offers potential managerial opportunities. The positive results of GenAI on all three outcomes show the value of this sales technology. The research suggests that this innovation could be integrated within the sales tech stack to assist salespeople through the sales process and administrative duties, potentially alleviating administrative responsibilities, increasing efficiency, and improving overall sales performance.

Track: Professional Sales/Sales Management

ID#: 1782

SERVICES MARKETING

Track Chair

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Impact of Hallyu on Korean Tourism

BEST ABSTRACT IN TRACK

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Abstract

This study delves into the symbiotic relationship between Hallyu, or the Korean Wave, and Korean tourism, particularly in the context of the burgeoning trend of Hyperlocal Tourism. Conducted through qualitative one-on-one interviews in South Korea, the research seeks to elucidate how Hallyu and Korean culture influence tourism patterns, and their interplay with the emerging concept of Hyperlocal Tourism. Hallyu tourism encompasses the influx of visitors drawn to Korea due to their fascination with various aspects of Korean culture, ranging from pop culture phenomena like K-dramas, K-pop, and K-beauty to traditional cultural elements. This cultural allure significantly contributes to the promotion of tourism in Korea on a global scale. Hyperlocal Tourism, a novel trend within the tourism industry, reflects tourists' preference for authentic experiences that encapsulate the genuine essence, history, and cultural heritage of a specific locale. This study aims to explore how tourists perceive and engage with this concept, even in the absence of prior familiarity with the term.

Introduction

The research project embarked on a comprehensive exploration of the interplay between Hallyu, Korean tourism, and the emerging trend of hyperlocal tourism. Through a multi-faceted approach encompassing literature review, surveys, interviews, and on-the-ground observations, the study unearthed significant insights into the motivations, experiences, and impacts of these phenomena on travelers and local communities. This report distills the substantive outcomes and findings of the project, focusing on three core areas: Hallyu, Korean tourism, and hyperlocal tourism.

Hallyu

The phenomenon of Hallyu, or the Korean Wave, has propelled South Korean culture onto the global stage, captivating audiences worldwide with its music, television dramas, films, and beauty products. The study delved into the nexus between Hallyu and tourism, revealing that a substantial proportion of international tourists cited Hallyu as a pivotal factor influencing their decision to visit Korea. Interviews with tourists underscored the profound impact of Hallyu on their travel experiences, as they sought to immerse themselves in the culture by visiting filming locations, attending concerts, and indulging in K-beauty products. Hallyu acts as a cultural ambassador, enticing individuals to explore Korea firsthand, thereby bolstering the country's tourism industry.

Korean Tourism

The study provided insights into the motivations and experiences of tourists visiting Korea, painting a nuanced picture of their perceptions and encounters. While tourists lauded Korea for its safety, cleanliness, and efficient public transportation, challenges such as language barriers and navigation difficulties were frequently cited. The allure of Hallyu, coupled with a desire for personal growth and cultural exploration, drove tourists to engage with both traditional and

modern facets of Korean society. Visitors reveled in experiences that showcased Korea's rich cultural heritage while embracing its dynamic urban landscape. The study emphasized the importance of enhancing tourist infrastructure, particularly through the development of a comprehensive mobile app to facilitate navigation and cultural immersion.

Hyperlocal Tourism

The emergence of hyperlocal tourism as a transformative trend in the tourism industry was a focal point of the study. Interviews with travelers unveiled a spectrum of interpretations regarding hyperlocal tourism, ranging from exploration of local communities to a quest for authenticity away from tourist crowds. Personal experiences played a pivotal role in shaping travelers' perceptions of hyperlocal tourism, as they sought meaningful interactions with local cultures and traditions. However, concerns regarding over-tourism and gentrification loomed large, underscoring the need for sustainable tourism practices that prioritize community engagement and cultural preservation.

Conclusion

In conclusion, the research project yielded substantive outcomes and findings that shed light on the complex dynamics of Hallyu, Korean tourism, and hyperlocal tourism. The study elucidated the influential role of Hallyu in driving tourism to Korea, highlighted the diverse motivations and experiences of tourists, and underscored the significance of hyperlocal tourism in fostering authentic cultural encounters. By addressing the opportunities and challenges inherent in these phenomena, the study contributes to a deeper understanding of contemporary trends in global tourism and lays the groundwork for future research and policy interventions aimed at promoting sustainable and inclusive tourism practices.

Track: Services Marketing

ID#: 1757

Presentation Proposal Abstract for: “Brokerage Competition in Demographically Differing Neighborhoods: a 25-City Study”

Prepared for consideration for presentation at the Atlantic Marketing Conference, Charleston, SC, September 2024.

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Extended Abstract:

Given the traditional 5-6% commission rates pervasive in real estate brokerage, it follows that brokering high-priced homes is more lucrative for a broker than low-priced homes⁵. A possible implication of this is that low-income neighborhoods could have a less competitive real estate brokerage market and consumers in these sub-markets are poorly served. This underprovision of brokerage services for neighborhoods with low-priced homes could further imply an additional obstacle to home ownership in poor and minority neighborhoods.

Consumer outcomes in the real estate brokerage industry have been of interest to academics (Hatfield et al., 2020; Barwick and Wong, 2019; Hsieh and Moretti, 2003; Yinger, 1981) and regulators (USFTC, 1983; USGAO, 2005; USDOJ, 2007) for decades. Regulator interest has not lessened in more recent years. In 2018 the FTC and DOJ hosted a workshop to examine the industry, focusing on the competitiveness of the industry and the degree to which consumers are served. And in 2020 the DOJ opened an investigation against the National Association of Realtors, alleging violations of antitrust laws to lessen competition to the detriment of home buyers. Soon after that, it filed a civil complaint against the NAR for alleged violation of the Sherman Act, charging that NAR rules, policies, and practices governing the marketing of real estate resulted in a lessening of competition among real estate brokers to the detriment of home buyers.⁶

A survey of the numerous concerns regarding the competitiveness of the brokerage market can be found in Barwick and Wong (2019). Market competition has been examined locally in such work as Colwell and Marshall (1986), and nationally by Beck, Scott, and Yelowitz (2012), but studies of this nature are encumbered by the difficulty in obtaining nationally representative data. Studies focusing on the competitiveness of sub-areas within larger markets are even rarer. In the most pertinent previous work to this study, Beck, Scott, and Yelowitz (2013) conducted a pilot study over six cities exploring the possible connection between real estate brokerage competition and demographic characteristics of individual neighborhoods. It was found that low-income and minority neighborhoods were not lesser served by brokerage firms, as measured by competition

⁵ This assumes the effort and cost to market homes are roughly equivalent across homes, or at least increase less than linearly with sale price.

⁶ U.S. v. National Association of Realtors, 2020. See Scarcella (2023), *REALTOR Magazine* (9/6/23), and *Wall Street Journal* (10/16/23) for discussions of how the legal case has evolved.

density, than other neighborhoods.

Data for Beck, Scott, Yelowitz (2013) were collected in 2007, and enough time has passed to revisit and expand this topic. This may be especially pertinent considering the significant changes that have occurred in the real estate brokerage industry over the previous decades.

To collect the necessary data, a web scraping tool was developed and used to collect data from Realtor.com. The website Realtor.com is a nationally consistent source, created by the National Association of Realtors, which generates results drawn from local multiple listing services. This allows for the creation of cross-sectional data on listings in a geographic area at a point in time. Local real estate associations in each local market typically create a multiple listing service, so local MLSs correspond closely to the geographic scope of the underlying real estate market. Via the website www.realtor.com, users can browse listings practically anywhere in the country by city or ZIP code. For each listing, information such as current asking price, number of bedrooms, home address, etc., is typically available. Important for this project, the home's listing broker is also reported. The information obtained from the web scrape is used to construct measures of market concentration from home listings of brokerage firms in geographic sub-areas.

These data were collected over 25 large U.S. cities (each with 1 million+ residents in the metro population), stratified over five regions. Home listing data have been collected in three waves: March 2022, September 2022, and March 2024. To measure competitiveness, a Herfindahl-Hirschman Index will be constructed for each ZIP code for each city at each time period. Each will be connected with the demographic characteristics of the sub-area (median income, home value, racial composition, etc.). The analysis will allow for a cross-sectional comparison of brokerage competitiveness across heterogeneous areas as well as a longitudinal comparison of market fluidity across both a six-month and a two-year period.

This project has several aims. The first is to update and expand the analysis from the Beck, et al. (2013) study from six cities in 2007 to twenty-five in 2022 and 2024. The second is to engage in a longitudinal analysis examining the fluidity in market composition over time in different sub-markets. This is a significant addition to the previous approach because the degree of dynamism among the market participants speaks to the competitiveness of the market structure in a way that cross-sectional analysis may miss.

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Track: Services Marketing
ID#: 1763

Cross-cultural Insights for Customer Engagement with Access and Lateral Service Systems BEST PAPER IN TRACK

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Lateral exchange markets enable owners of underutilized resources, like cars and homes, to offer them to those in need via technology platforms. They serve as alternatives to access exchange markets that provide temporary access to services such as hotels room, metered taxis, and rental cars. Initially, these services are oriented toward their home market's culture, but expanding internationally requires learning about other cultural preferences. Understanding cultural orientations and customer preferences in each market is vital for innovation, promotion, and long-term growth. Financial success hinges on aligning new service benefits with customer preferences, and insights into cultural influences can be quickly applied to similar markets. Thus, this study provides an exploration of ride-hailing and room-sharing services in access and lateral exchange markets across six countries on five continents with varying cultural orientations. The results provide insights that can be diffused into countries with similar cultural orientations.

Track: Services Marketing

ID#: 1800

SOCIAL MEDIA MARKETING

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Sustainability Challenges and Consumer Perceptions: A Cross-Generational Analysis

BEST ABSTRACT IN TRACK

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Extended Abstract

The evolving landscape of sustainable practices emphasizes the shift from short-term, profit-driven approaches to long-term strategies. Sustainability is now a global initiative encompassing various sectors, including academic research, contributing to successful implementation. The success of a business is no longer solely measured by profit; it depends on a commitment to sustainable practices, reflecting a response to market trends and environmental and societal needs (Grubor et al., 2017). Sustainability is framed as a core concept, balancing economic, social, and environmental factors in decision-making. Forward-thinking businesses recognize sustainability as a source of innovation and competitive advantage, engaging in activities to reduce their environmental footprint and enhance social impact (Kalender et al., 2016). Companies striving for competitive advantage in the dynamic business environment focus on providing superior customer value. Shifting from a product-centric to a customer-centric approach is essential for long-term success (Woodruff, 1997). Understanding customers goes beyond surface-level insights, delving into current needs, preferences, and behaviors, and anticipating future changes. Adapting to evolving customer perceptions of value is crucial for staying relevant (Flint et al., 1997).

Customer value, representing perceived benefits and overall worth, is pivotal. Crafting compelling customer value propositions requires a deep understanding of customer motivations and aligning resources with customer needs (Slater, 1997). Consumer values significantly shift towards sustainable choices, influencing tourism, online retail, and fashion industries. Major corporations are making commitments, like achieving zero emissions, aligning with the Sustainable Development Goals, and showcasing a growing recognition of the importance of sustainability. Sustainable product development is a priority for many companies, but understanding consumer purchasing decisions is crucial for these products to succeed (De Medeiros et al., 2013). Environmental concerns, ethical considerations, and perceived quality and value play a role in consumers choosing sustainable products.

Consumer awareness of the environmental impact of consumption habits is growing, influencing their product and service choices (Trivedi et al., 2018). Sustainable performance now plays a pivotal role in consumer buying behavior, and businesses strive to create value for customers (Vega-Vazquez et al., 2013). Customer value is a complex concept involving a reciprocal relationship and subjective perceptions influenced by various factors (Heinonen et al., 2019). The means-end theory provides a hierarchical framework for understanding customer value,

involving attributes, consequences, and desired end states (Gardial et al., 2008). Customers seek practical benefits and psychological and emotional satisfaction from sustainable products, stating their lifestyle and values (Haigh, 2011). The perception gap, the disparity between customer and retailer views, highlights the importance of aligning with and meeting customer expectations (Anitsal, 2007).

In today's dynamic business landscape, consumers are not solely driven by price; they are informed and influential, shaping the values businesses should align with (Vega-Vazquez et al., 2013). Environmental and social consciousness have influenced consumer behavior and perception of value, with sustainability becoming a positive factor in decision-making. Businesses that align with customers' environmental and ethical values gain a competitive edge. Sustainability has become a key driver of customer preference, significantly impacting a business's success (Pickett-Baker et al., 2008). Sustainable behavior encompasses environmental, social, and economic aspects intertwined with the Value Hierarchy Model (Barrera-Verdugo, 2022). Customers systematically conceptualize desired value, deconstructed into dimensions like attributes, attribute performances, and consequences (Gardial et al., 2008). The hierarchy reveals how customers assign significance based on their goals and purposes, creating a holistic framework for assessing product and experience value (Woodruff, 1997).

Understanding variables that motivate sustainable purchases is vital for successful implementation (de Medeiros et al., 2013). Perceived customer value, assessed through means-end theory, is crucial for businesses to design and market products aligning with customer goals and values (Gardial et al., 2008). The exploration of sustainable products involves diverse terminologies like "green purchase," "sustainable purchase," "green consumption," and "green product," reflecting the multidimensional nature of sustainability in the context of consumer choices (Ham et al., 2022; Bordian et al., 2023; Djafarova et al., 2022).

The sustainable practices businesses implement create different hierarchy levels of value for customers. Understanding and managing sustainable perceived value is crucial for marketing and product development strategies (Viciunaite et al., 2020). This involves uncovering the factors influencing consumers' views of sustainable products and classifying them within the triple bottom-line framework (Camilleri et al., 2023). The triple-bottom-line framework provides a comprehensive perspective, aiding businesses in gaining a deeper understanding and enabling them to develop more effective strategies. Implemented by businesses, sustainable practices create various levels of customer value by aligning with environmental considerations and outcomes. Managing sustainable perceived value is crucial for effective marketing and product development strategies (Viciunaite et al., 2020). Understanding the factors influencing consumers' views of sustainable products within the triple bottom-line framework aids businesses in developing comprehensive strategies.

Attributes are the tangible or observable features of a product or service. These are characteristics that customers can directly perceive, measure, or experience (Gardial et al., 2008). In the context of sustainable products, attributes refer to specific features that make a product environmentally friendly or socially responsible, including energy efficiency, recyclability, ethical sourcing, and eco-labeling (Yue et al., 2016). In the decision-making process, customers seek products that are not harmful to nature, emphasizing recyclable ingredients and reducing

environmental pollution during usage (Kumar et al., 2015). Encouraging sustainable behavior requires consumers to choose products crafted from eco-friendly materials or opt for second-hand options (Rausch et al., 2021).

Utilizing sustainability labels is crucial, serving as indicators of a product's environmental and ethical attributes. These labels empower consumers to make informed choices aligned with their values, fostering a more environmentally conscious approach (Viciunaite, 2020). Minimizing emissions, emphasizing low emission levels, and prioritizing sustainable materials contribute to mitigating environmental impact and creating environmentally responsible products (Yue, 2016; Viciunaite, 2020). Manufacturers benefit from aligning with environmental conservation goals and contributing to a sustainable marketplace. Energy-efficient practices further contribute to resource conservation and reduce greenhouse gas emissions, aligning with environmental sustainability and benefiting consumers economically (Sonetti, 2019). Prioritizing fair trade ensures ethical practices throughout the supply chain, addressing social and economic inequalities (Buffa, 2015). Minimizing waste aligns with environmental responsibility, yielding cost savings and contributing to a circular economy (Huang et al., 2022).

The next level of the value hierarchy, consequences, are the outcomes or results that customers believe will arise from the presence of specific attributes. They represent the perceived benefits or drawbacks associated with the attributes of a product (Gardial et al., 2008). The consequences of sustainable practices on customer value include diminished environmental impact, financial savings, and a sense of contributing to societal benefits generated by sustainable attributes (Barrera-Verdugo, 2022). Sustainable lifestyle choices, social responsibility, and environmental protection are integral to these outcomes, reflecting customers' aspirations to positively impact society and the environment (Haigh, 2011).

Customers derive personal fulfillment from a sustainable lifestyle motivated by the broader impact of their choices on the environment and society (Kumar et al., 2015). Deepening environmental awareness attracts customers to green marketing efforts, emphasizing eco-friendliness and environmental benefits integrated into daily lives (Pickett-Baker, 2018; Djafarova et al., 2022). Social responsibility is expected when companies demonstrate genuine sustainable efforts, influencing customer endorsement and support (Ham et al., 2022). Customers actively support businesses engaging in environmentally responsible practices and avoid those associated with environmental pollution, highlighting the significant influence of sustainability values on purchase decisions. Sustainable practices also impact the perceived legacy for future generations, with gender and generational factors influencing this effect. Young consumers recognize the potential to safeguard or jeopardize future generations' access to resources, leading to a commitment to actions that do not harm the planet (Djafarova et al., 2022).

Values of desired end states represent the ultimate goals or personal values customers seek to fulfill through consuming a product or service (Gardial et al., 2008). For a sustainable product, the desired end state is the customer's satisfaction derived from making environmentally conscious choices, contributing to societal well-being, or aligning with ethical and responsible consumption practices. Social identities play a role, with consumers selecting products that communicate their identities and signal elevated social status through sustainable consumption decisions (Brick et al., 2017; Palomo-Vélez et al., 2021; Giskevicius et al., 2010). This

phenomenon suggests that consumers choose eco-friendly products for their environmental benefits and to showcase a commitment to societal values associated with sustainability.

Generational differences influence attitudes and behaviors related to sustainability, impacting purchasing decisions (Yamane et al., 2021). Baby Boomers show less interest in sustainability due to their upbringing in an era with less environmental consciousness (Nichols et al., 2022). With higher disposable income, Generation X focuses on practical sustainability, emphasizing price and achievable practices (Brand, 2022). Millennials are environmentally aware, prefer sustainable products, support eco-friendly brands, and are willing to pay more for sustainability (Nichols et al., 2022). Generation Z, born in the digital age, is highly concerned about ethical and environmental issues, influencing their purchasing decisions (Djafarova et al., 2022).

Millennials are known for their heightened environmental awareness. They have grown up in an era of increased environmental challenges and concerns, such as climate change, and are often deeply committed to addressing these issues. Many Millennials prefer to purchase sustainable products and support eco-friendly brands and are more likely willing to pay more for sustainable products (Nichols et al., 2023). They actively seek products with environmentally responsible certifications and practices, such as organic, fair trade, or cruelty-free. Millennials find business practices appealing when they surpass the mere communication of a product's sustainability; instead, they should incorporate customers' values. This involves highlighting how purchasing the product can actively contribute to resolving or alleviating social and environmental issues (Falke et al., 2022).

Generation Z has a strong awareness and desire towards ethical and environmental issues (Djafarova et al., 2022). Therefore, sustainability is one of the considerations when they make purchase decisions compared to other generational cohorts. Young people are interested in specific aspects of sustainability, which affects how they make decisions, what motivates them, and how they behave (Buffa, 2015). Consumers, especially younger ones, are willing to pay more for environmentally friendly or responsibly sourced products, showing their support for sustainability through their purchases (Nichols et al., 2023). Generation Z is soon to become the next dominant generation and is equally concerned, and in many cases more concerned, about sustainability than millennials. Some research findings show that Generation Z consumers are influential actors in the family decision-making process and are likely to guide their Generation X parents in favor of online retailers while choosing the point of sale.

Customer values contribute to enduring competitive advantages and fostering sustainable growth. The research aims to incorporate the customer value hierarchy perspective into sustainable objectives, categorizing sustainable practices within each value hierarchy level. By highlighting the right attributes and linking them to meaningful consequences and values, marketers can appeal to consumers' deeper motivations and values, making their products more compelling and aligning them with customer needs and desires. The study focuses on Millennials and Generation Z, considering their substantial influence in shaping decision-making processes and their strong inclination towards pro-environmental behaviors.

Understanding customer values and aligning products with these values is crucial for businesses to gain a competitive advantage in the evolving landscape of sustainable consumption. The

varied terminology used in the literature reflects the complexity of sustainability, encompassing environmental, economic, and social dimensions in the context of consumer choices—the multifaceted nature of sustainable perceived value, spanning attributes, consequences, and desired end states. Businesses must align with the diverse factors influencing consumer choices to foster a more sustainable marketplace and contribute to environmental and social well-being. The interconnectedness of these elements emphasizes the need for comprehensive strategies that consider the entire lifecycle of products and services, from sourcing sustainable materials to promoting ethical practices and signaling positive social identities.

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Track: Social Media Marketing

ID#: 1770

Beyond the Screen: Unveiling Ethical Dimensions of Consumer Relationships with Virtual Influencers

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Abstract

In a world where the line between our ability to discern the difference between what's real and what's fake is increasingly blurred, enter- the virtual influencer. Miquela Sousa, Noonoori, Lu do Magalou...do these names seem familiar? If so, you may be one of the 58% of consumers who reportedly follow a virtual influencer (The Influencer Marketing Factory, 2022). As virtual influencers gain popularity and their usage becomes more mainstream, it is critical to examine the ethical implications that arise concerning transparency, trust and privacy among virtual influencer-consumer relationships. Extant research shows that the social media influencers are under scrutiny because of their questionable ethical practices (Grgurić Čop et al., 2024), which further necessitates the need to explore the ethical implications of virtual influencers-consumer relations.

The purpose of our exploratory study is to investigate consumer awareness of the virtual nature of the influencers they engage with and the factors that impact perceived transparency. We explore the elements that build consumer trust with virtual influencers, and examine how credibility perceptions compare to human influencers. Additionally, we investigate consumer privacy concerns regarding data collection practices by brands utilizing virtual influencers.

Our study offers insights into the ethical dimensions involved with virtual influencer marketing. Understanding the dynamics and potential risks of virtual influencer usage is important for responsible industry practice and informed consumer choice. Our research aims to enhance current literature by exploring ethical dimensions in an attempt to foster transparency, build trust and prioritize privacy in this new landscape.

Keywords: Virtual Influencer, Influencer Marketing, Ethics, Trust, Privacy, Transparency

Relevance to Marketing Educators, Researchers and/or Practitioners: This research holds significance for marketing educators, researchers and practitioners alike. With the increased usage of virtual influencers being used in marketing, the greater the need to understand the virtual influencer-consumer relationship as it relates to transparency, trust, privacy, and the ethical implications of these relationships. Our research will help educators facilitate discussions on responsible marketing as it pertains to virtual influencers. Researchers will be interested in the investigation of the novel and growing phenomenon of virtual influencer marketing and the under-explored area of ethical implications. Lastly, practitioners will benefit by gaining additional knowledge and strategies for implementing responsible marketing strategies.

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Track: Social Media Marketing

ID#: 1788

Examining Net Promoter Score and Factors as Predictors of Recommending Influencers: From the Perspectives of Customer

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Abstract

In recent years, the increasing importance of influencers in digital marketing and social media has become evident. As a result, influencers have become essential for companies and customers, necessitating careful selection of influencers for both groups. Influencers provide significant benefits to both companies and their customers. Research indicates that companies and customers prefer influencers with more followers; the more followers an influencer has, the more likely those followers are to adopt the influencer's recommendations on social media. Consumers often seek influencers with whom they can relate and who appear accessible, meaning they are approachable, responsive, and interactive with their audience, thus fostering a community atmosphere and a sense of belonging. This suggests that influencers need to explore ways to increase their follower count, which involves identifying factors that predict customers' recommendations of those influencers.

This study examines influencer performance using the NPS metric and identifies the factors as potential predictors of the likelihood of recommending the influencers to friends, family members, and potential customers. Based on a review of extant research, this study proposes that the factors related to influencers, customers, emotional attachment/bond, and corporate social responsibility would positively impact the likelihood of recommending the influencers to potential followers. The study also offers several research propositions and suggests directions for future research. Since no prior studies have addressed how to increase the followers of influencers, the framework and research propositions presented in this study would fill the void in influencer marketing literature, and the findings of such a study will significantly contribute to the influencer marketing literature and benefit all parties involved in influencer marketing.

Keywords: Influencers, Influencer Benefits, Customers Recommending Influencers, NPS Of Influencers, CSR For Influencers

Track: Social Media Marketing

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The Effective Use of Social Media by Universities May Be More Complicated Than We Think: Toward a Better Understanding of Social Media's Impact on College-Related Decisions

BEST PAPER IN TRACK

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Abstract

Social media has fundamentally changed how colleges and universities market themselves by enabling enhanced engagement, influencer partnerships, community building, and even more tightly-targeted marketing. These changes have made higher education marketing more interactive, personalized, and responsive to the digital preferences of today's prospective students. Universities, however, must adopt more strategic, transparent, and audience-centered approaches to leverage social media effectively. By addressing the identified shortcomings and focusing on best practices, this paper demonstrates how universities can better employ social media to attract prospective students, build more durable relationships with their communities, and enhance brand reputation. Suggestions for future research are included.

Introduction

In recent years, social media has become a pivotal tool in shaping how students make college-related decisions, including choosing a college and selecting a major (Pharr, 2023). Research confirms that social media significantly influences these decisions through various mechanisms such as information dissemination, peer influence, and community building. However, the complexity of social media's impact on students' decision-making processes is not fully understood, and universities may face challenges in effectively leveraging these platforms. This paper aims to provide a comprehensive overview of how social media influences students' college-related decisions and to identify potential shortcomings and best practices for universities in their social media marketing strategies. By exploring existing research and highlighting future research questions, this paper seeks to offer insights into optimizing social media use in higher education marketing.

Literature Review

Research shows that social media has widespread impact on the consumer decision process—the generic process that underlies all consumer purchase decisions. Findings may be divided into three pertinent categories: (1) social media's influence on the decision process, (2) its influence on the outcomes of the decision process, such as on purchase intentions and consumers' choices, and (3) enduring impacts to the brand. The influence of social media across the consumer decision process for college-related decisions is similarly widespread (Pharr, 2022). Research has found that social media plays a significant role in: facilitating information search and increasing student awareness, shaping students' interests and perceptions thus impacting

alternative evaluation and consideration, and influencing ultimate decisions and choices. Information Search and Exposure. From the outset of the decision process, social media serves as a primary source of information for prospective students. Social media provides students with access to a vast amount of information about colleges and majors that they might not have encountered otherwise. Research has found that students increasingly rely on social media content (Mertz & Gater, 2018) and that the nature and quantity of this information plays a significant role in shaping students' interests and perceptions of various colleges, disciplines, and majors (Neier & Zayer, 2015).

Students use social media to facilitate the information-gathering process because it provides detailed information, transparent opinions, and decision support (Wang, et. al., 2020). Indeed, the quantity and nature of information available via social media are primary drivers of student interest in and usage of social media to assist with college-related decisions. Mason (2019) found students prefer social media for its transparent, more organic student-generated, and student-centered content. Young adults in general say authenticity is what draws them to social media and why they use it (Sullivan, 2021). Students feel they can gain authentic insights into campus life and academic programs via the information accessed on social media.

Research also confirms that students prefer the type of college-related content found on social media when information gathering. Videos, pictures, and testimonials are preferred types of social media content among prospective college students (Fishbein, 2022; Pew Research 2021). It is especially important for prospective students to be able to see raw or organic video footage and photographs posted by actual students as opposed to staged photographs or videos produced by university marketing professionals (Mason, 2019). Barnes et. al. (2013) found prospective students who viewed real-life experiences and testimonials from current students via social media were significantly impacted in both their perceptions and decisions of colleges and majors.

Alternative Evaluation, Consideration, & Choice. After information gathering, consumers begin evaluating information and forming a consideration set in phases that shape the final decision or ultimate choice. One of the most potent aspects of social media is its ability to facilitate peer influence and social proof during the consideration and decision phases. "Social proof" refers to a psychological phenomenon where people conform to the actions and opinions of others, especially when they are uncertain about what is the appropriate behavior or decision in a given situation (Cialdini et. al. , 2004). Research (Tariq et. al., 2019; Neier & Zayer, 2015; DeAndrea et. al., 2012) confirms that consumers often look to their social networks for validation and recommendations before making purchasing decisions, demonstrating that consumers are likely to be influenced by the opinions and behaviors of their peers on social media and showing that peer recommendations and reviews play a crucial role in shaping consumer choices. Amankwaa et. al (2021) found that students were significantly influenced in their educational choices by past students (alumni) as well as present-day influencers who shared personal opinions and testimonials on social media. Seeing alumni and influencers discussing and endorsing specific colleges or majors can serve as social proof, validating students' choices.

The upshot here seems to be that, when faced with the complex decision-making process that often accompanies college and major choices, students will rely on cognitive shortcuts or

heuristics. Peer recommendations and testimonials can serve as mental shortcuts that simplify decision-making by providing quicker judgments based on others' experiences.

A Role in Postpurchase Behavior: Cognitive Dissonance Reduction. The influence of social media does not end after a decision is made. Research shows that influencers, online communities, and social media content can play a significant role in reinforcing decisions and reducing uncertainty (DeAndrea et. al., 2012). Social reassurance can consequently serve as a critical means of reducing cognitive dissonance.

Social media expedites dissonance-reduction by acting as a tool for consumers to validate their decisions, and social validation helps decrease postpurchase psychological discomfort (Novak & Hoffman 2019) . Social media, particularly user-generated content and brand communities, provide an accessible platform for positive reinforcement and other forms of validation. Consumers use social media to seek confirmation from peers and online communities, which helps them align their post-purchase attitudes with their pre-purchase beliefs thereby reducing cognitive dissonance (Novak & Hoffman, 2019). Moreover, consumers with pre-existing positive attitudes toward a brand are motivated to reduce cognitive dissonance by interpreting social media content in a way that aligns with their favorable views (DeAndrea et. al. , 2012).

Long-Term Brand Impacts. It seems essential that universities understand and consider the longer-term impacts to their brands that result from social media. Research (Schivinski & Dabrowski, 2016) has shown that social media can impact a number of brand-related constructs including brand affect, brand engagement, brand attitude, brand trust, and brand equity. Furthermore, research indicates preexisting brand attitudes are able to significantly mediate the influence of social media on consumer purchase intentions as well as overt purchase behavior.

In today's digital-forward media environment, brands routinely leverage social media to engage with consumers and influence their purchasing decisions. The use of social media can have a number of effects on the brand and, in turn, be impacted by a number of brand effects. For example, research has shown that consumers with positive brand attitudes are more likely to perceive social media content favorably and engage with it more actively (impact to brand engagement) (Schivinski & Dabrowski, 2016); that the impact of social media content is amplified by pre-existing positive brand attitudes and increases brand equity, a significant element of which is brand trust (Bruhn et. al., 2012); and that social media content that aligns with positive brand attitudes has the ability to stimulate and strengthen brand affect (positive emotions) that goes on to impact customer satisfaction and brand loyalty (Bruhn et. al., 2012).

The reader may note the outsize influence of preexisting brand attitudes on social media impacts. Existing brand attitudes significantly mediate the influence of social media on consumer purchase intentions and behavior (Schivinski & Dabrowski, 2016). This mediation effect occurs because consumers' pre-existing attitudes toward a brand shape how they perceive and respond to social media content related to that brand. Goh et. al. (2013) found that consumers with positive pre-existing attitudes towards a brand were more likely to engage with the brand's social media content, which in turn increased their purchase intentions. Conversely, those with negative or neutral attitudes were less influenced by social media interactions, leading to the conclusion that existing brand attitudes act as a filter through which social media content is processed and influence the overall impact on purchase behavior.

In summary, research consistently indicates that existing brand attitudes play a crucial role in mediating the influence of social media on consumer purchase intentions and behavior. Positive brand attitudes enhance the effectiveness of social media marketing by increasing consumer engagement, fostering emotional connections (brand affect), and nurturing brand trust. This suggests brands should focus on building and maintaining positive attitudes to maximize the impact of their social media strategies.

Implications: Where Universities Fall Short

The multifaceted effects of social media underscore the need for universities to strategically engage with prospects on these platforms. Unfortunately, some of these effects are not well understood and this may limit the applicability of research findings to decisions by universities about how to best use social media. Research highlights several areas where universities may encounter shortcomings in their use of social media for marketing purposes:

Overemphasis on Vanity Metrics. Universities have tended to focus excessively on metrics such as likes and shares rather than track meaningful engagement (Ahmad & Saha, 2020) or attempt to link social media applications to conversion rates. This can lead to shallow engagement strategies (Lusch & Vargo, 2014) that do not effectively develop prospective students' interest and bind institutions to lackluster social media plans that fail to leverage the engaging-power of social media.

Lack of Authenticity. Some universities compromise authenticity in their social media content by resorting to overly-polished or professionally-designed posts that do not resonate with their audience. Research (Mason, 2019) demonstrates that authentic and relatable content is crucial for building trust and credibility with student audiences.

Ignoring Two-Way Communication. One of the most recognized benefits of social media is the opportunity for two-way communication. Universities often emphasize outbound marketing and use social media as a broadcasting tool, neglecting opportunities for meaningful interaction and dialogue with prospective students (Ahmad & Saha, 2020). Research demonstrates that engaging with students around comments, questions, and concerns is essential for building relationships (Lovejoy & Saxton, 2012).

Inconsistent Branding and Messaging. The sheer volume of social media content created and facilitated by the academic and service units of universities and the lack of coordination between different departments can result in inconsistent branding and messaging. Ensuring a consistent and coherent narrative across platforms is critical for maintaining a strong brand identity (Kim & Ko, 2012).

Failure to Adapt to Changing Trends. Keeping pace with evolving social media trends and platform changes is challenging as the student audience turns over every three or four years. Industry reports show younger students are more innovative and less risk-averse in their adoption of new social media than their older counterparts (Pharr, 2023). Universities will need to be sensitive to the changing tastes of prospective college students and be agile and adaptive in their strategies to remain relevant (Ahmad & Saha, 2020).

Negative Feedback Management. Given the free-wheeling and spontaneous nature of social media, universities may lack experience or be unprepared to effectively handle negative feedback or criticism. Research (Waters & Jamal, 2011) indicates that ignoring or deleting negative comments instead of addressing them can exacerbate dissatisfaction and harm relationships with stakeholders. Addressing negative comments transparently and constructively via social media and not just through traditional PR channels is crucial for reputation management.

Measuring Effectiveness and ROI. Given the plethora of social media content created by the various departments and units of a university, accurately measuring the effectiveness and return on investment (ROI) of social media marketing efforts is difficult (Kaplan et. al., 2010). Relying solely on superficial metrics without linking outcomes to broader institutional goals such as enrollment, retention, or alumni engagement could lead to overuse of social media and misallocation of resources.

Conclusion

Social media has fundamentally changed how colleges and universities market themselves by enabling enhanced engagement, increasingly targeted advertising, influencer partnerships, community building, and real-time communication. These changes have made higher education marketing more interactive, personalized, and responsive to the digital preferences of today's prospective students. As social media continues to evolve, its role in shaping students' choices is likely to grow, making it an essential consideration for colleges and students alike. Universities must adopt more strategic, transparent, and audience-centered approaches to leverage social media effectively. By addressing the identified shortcomings and focusing on best practices, universities can better employ social media to attract prospective students, build more durable relationships with their communities, and enhance brand reputation.

Future Research Questions

While this paper has illuminated the current applications and impacts of social media as they pertain to higher education institutions, several areas of needed research were also identified:

Effectiveness of Different Platforms. How do different social media platforms (e.g., Facebook, Instagram, TikTok) impact engagement levels, conversion rates, and brand perception among prospective students?

Role of Influencers. What are the best practices for leveraging influencers on social media? Who will be the most effective type of influencer among prospective students versus current students? How do these types of partnerships influence prospective students' perceptions and decisions?

Impact of Content Types and Formats. How do different types of content (e.g., videos, blogs, live streams, virtual events, etc.) perform in terms of engagement and conversion rates? What role does user-generated content (UGC) play in enhancing authenticity and engagement?

Cultural and Regional Differences. How do cultural and regional differences influence social media marketing strategies and outcomes? What strategies are effective in diverse global

markets?

Measurement and Analytics. What are the most effective metrics and analytics tools for measuring the success of social media marketing efforts? How can universities integrate social media data with other marketing analytics?

Future research along these lines will help to optimize the use of social media in higher education marketing.

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Track: Social Media Marketing
ID#: 1803

SPORTS MARKETING

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An Exploratory Investigation of College Student Betting Behaviors: How Pervasive is Sports Betting in the Age of Legalized Gambling?

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Extended Abstract

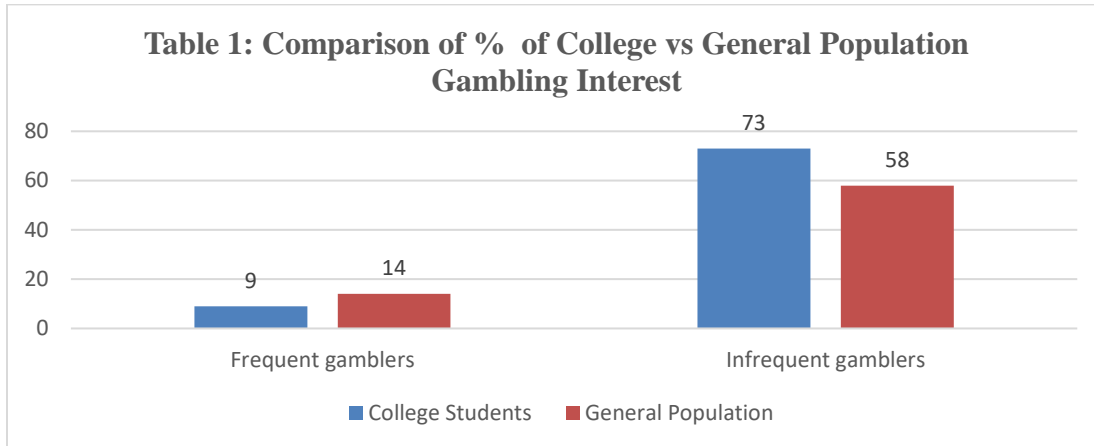
Recent research indicates that younger generations are increasingly engaging in online sports gambling (Wang et al., 2021). As the authors indicate, 0.5% of the general population was classified (in a 2018 national survey) as pathological gamblers, with 4% identifying as “at-risk” gamblers---more than double the figure recorded in 2015. College-aged populations appear to be at even more risk for problem gambling than the general population, with as many as 6.13% of students assessed as pathological gamblers and 10.23% as problem gamblers (Nowack, 2018). U.S. College students enjoy sports gambling activity, unsurprising since sports are so ingrained in American culture and there are so many sporting events available on which to place bets (i.e., March Madness bracket pools, daily fantasy sports, the Super Bowl, the Kentucky Derby, etc.). While many bets are “one-off” and pose no threat to the typical college student (because they generally involve small bets made in a social setting), many other college students bet frequently and in larger amounts. While the true extent of sports betting among college students is unknown, the trend in online sports betting appears to be on the upswing.

Further, because of the vast sums of money involved, sports betting behavior is being encouraged. Indeed, most North American professional sports leagues (particularly the NBA and NFL) have encouraged legalized sports gambling because they get a percentage of the profits from licensed online gambling platforms. In addition to sports leagues, many states in the U.S. (at least 30) have legalized or are planning to legalize online sports betting. All major news sports programs (e.g., ESPN) now routinely feature online betting advertising and sponsorships, indicating that private businesses and public officials are placing dollar signs before the welfare of young college-age gamblers (Carr, 2023).

This research examined sports betting among college-aged students using an online QUALTRICS survey administered a week prior to the 2023-24 Super Bowl. In total, 140 students, 53% male, 43% White, 50% Black, 6% Hispanic, and 3% Asian, with an average age of 21 completed the survey. The survey included students from three southeastern universities.

The results suggest that gambling among college students is not as prevalent as gambling among the general population. Our college-aged sample reported lower engagement in sports betting than a similar sports betting survey commissioned by the NCAA examining the general population (Sports Betting Activities Survey April 2023). Specifically, we found that only 9% of students vs. 14% of the general population indicate frequent or very frequent sports betting. Furthermore, 73% of college students have never or infrequently placed a bet, while 58% of the

general sample indicated the same. Interestingly, among the college-aged population, we found no difference in the likelihood to bet by race, in direct contrast to the general population, where Black respondents report the highest betting level (68%). Of concern, however, is the fact that passionate sports fans are significantly more likely to bet and are more motivated to watch games when they have placed a bet.



Although our results suggest that betting among college students is not as prevalent as betting within the general population, there is still reason for concern. First, roughly 24% of the college-age population admitted to online gambling. This is significant, as the average age of our sample was 21. However, the sample did contain younger respondents and the legal age for sports betting in the states surveyed was 21, which likely dampened our results. Second, as considerable research has shown, college students are under more emotional stress than other members of the general population and, hence, are more vulnerable to a gambling addiction. Finally, this number is concerning as previous research has indicated that students are unlikely to self-report gambling issues and often are not identified until the addiction has resulted in other significant issues such as substance abuse, erratic behavior, or sudden drastic weight loss (Staley, 2023). Future research is needed to identify factors that make students more susceptible to gambling addiction and investigate effective early interventions.

Key Words: *Sports gambling; College student sports fans and betting behavior; Fan attitude toward online sports betting; College student knowledge of online betting.*

Relevance to Marketing Educators, Researchers, and Practitioners: The proliferation of online sports betting outlets has made placing a sports bet far more accessible than it once was. Instead of placing a bet with an unlicensed bookie, sports gamblers can now choose any legal betting site where they can place their bets without legal ramifications (or issues related to organized crime). Because betting has well-known negative personal (and societal) impacts, the more marketers and policymakers understand the potential problems associated with gambling addiction, the more able they will be to implement safeguards to control what could potentially lead to societal damage. Although there are many studies devoted to the topic, most appear to reflect dates preceding the recent proliferation of legalized online gambling sites authorized by an increasing number of states. The current exploratory study is thus an attempt to develop an understanding of the extent to which online gambling has taken hold as a pastime among college student sports fans.

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Track: Sports Marketing

ID#: 1794

Overcoming Negative Perceptions of the Sport of Hockey When Promoting Hockey to African American Parents of Young Athletes: An Exploratory Study of Potential Obstacles

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Abstract

The current research was undertaken as part of a semester project for students enrolled in a Marketing Research class (MKTG 444). As part of the service learning component, the project was conducted on behalf of the *NC Amateur Hockey Association* in an effort to assist the organization's efforts to increase young African American athlete participation in the sport starting at a young age (i.e., 4-10). In general, our findings revealed that awareness levels of the sport in the African American community in the Carolinas is quite limited, and that for a number of reasons, the overwhelming majority of the sample population was not interested in directing their children into the sport. One of the mitigating factors that might increase participation among this population would be to identify individuals within the community who have participated in the sport and encourage them to act as mentors for young minority athletes. The study revealed that while the potential market is estimated to be anywhere between 10-25% of youth sports participants in general, hockey representatives will need to be more hands-on in terms of generating awareness of the opportunities in the sport.

Keywords: Marketing Sports; Minority Participation In Hockey; Promoting Hockey To Minority Community

Relevance to Marketing Educators, Researchers and Practitioners: Despite its popularity within the White community, the sport of Hockey is virtually unknown in the minority community. For Hockey to grow, it will have to reach out more fervently to members of the minority community and become more accessible. Sports Marketers have a big task in front of them but there are any number of innovative ways to make the sport more attractive and accessible to African American parents of young athletes. The problem for Hockey marketers is that traditional advertising is not going to move the needle...hence, if Hockey is serious, they will need to engage in more personal selling of the sport and it has to begin with parents when their children are young.

Introduction

A significant number of anecdotal articles have been written on the topic of black athlete participation (or lack thereof) in the sport of hockey. The number of black athletes participating in the sport appears quite low even in *hockey mad* Canada where the participation rate among

Canadian born black athletes at the NHL level hovers around 4%. In the U.S., African American athlete participation in the sport is estimated to be even lower. Considering that African American athlete representation at the professional level for both football and basketball is significantly higher than black representation in the general U.S. population (i.e., estimated at 70% representation in the NBA versus roughly 13.5% in the general population), hockey obviously has a steep hill to climb. Indeed, one could realistically suggest that black hockey players in the NHL stand out primarily *because they are so rare*. During the 2021-2022 season, for example, there were only 40 black or mixed race players on NHL rosters (<https://www.freshgear.com/hockey-faqs/how-many-black-hockey-players-are-in-the-nhl/#>).

Unfortunately, many of the reasons provided that purportedly explain the lack of black athlete participation in the sport tend to be negative, and most of these factors generally relate to the same forces that previously excluded African Americans from participation in other areas of society (i.e., racism, socio-economic issues, geographic issues, lack of black role models, etc.). As a scathing 1997 article from *The Journal of Blacks in Higher Education* previously reported, out of the (then) more than 3500 college hockey players in the U.S. during the 1996-1997 season, only *seven* were black athletes. According to the editorial, the same forces that prevented Jackie Robinson from playing professional baseball prior to 1947 were simultaneously at work preventing Herb Carnegie, a talented minor league player from Quebec, from playing in the NHL. The same article noted that during the first eighty years of the league, only one black hockey player made it to the professional ranks (in 1958). It was not until 1974 that the second black player entered the league, and the individual's time in the league was tragically scarred by racial abuse from fans, officials, and even players from his own team.

Many decades later, the sport of hockey has attempted to distance itself from the sort of societally based racial attitudes that once permeated hockey and prevented minority athletes from participation in major professional sports leagues in general. While today's hockey supporters must acknowledge the sport's vile history toward black and other minority hockey players, the current group of NHL owners, general managers, and marketing personnel contend that great effort has been made to eliminate the racially charged atmosphere that once alienated minorities and prevented them from participation in the sport. Indeed, minority recruitment programs are now a priority for the league and clubs at every level are attempting to encourage minority participation in the sport as early as possible. The goal is to get young athletes interested early before they choose a different sport. Further, hockey fans and players alike argue that the participation of *anyone* who loves the sport of hockey and who would like to see it grow in popularity is welcome, regardless of the player's racial characteristics or cultural origins. As example, Canadian and U.S. hockey leagues at all levels are actively engaged in efforts to attract non-white participants through numerous outreach programs (i.e., such as minority development leagues) specifically designed to entice young black and other minority athletes. The goal is to change the attitude of young black athletes toward the sport and lure them into participating as soon as the athlete is old enough to begin ice-skating (<https://globalsportmatters.com/youth/2022/05/03/how-youth-hockey-curbing-racism-nhl/>). Even though the sport's current gatekeepers realize the effort required to change minority perspectives of the sport, they nonetheless appear vested in creating a welcoming atmosphere that attracts young minority players.

Regardless of the sport's outreach efforts, however, young black players continue to gravitate toward either football or basketball---a cultural hurdle that has significantly impacted even baseball's popularity among this demographic. Unlike hockey, however, baseball was once the most popular sport among members of the African American community---even during a period when African American athletes were prevented from playing in the all-white major league (<https://www.loc.gov/collections/jackie-robinson-baseball/articles-and-essays/baseball-the-color-line-and-jackie-robinson/1940-to-1946/>). Once segregation had run its course and black players from the old Negro leagues were allowed to compete, black players thrived and many of those players became Hall-of-Fame icons of the sport. Given its rich history within the African American culture, one would suspect that African American players would be well represented, if not dominating MLB rosters. Instead, native-born American (black) players currently represent less than 9% of all players in the MLB (Solomon 2021). If baseball is finding it difficult to recruit African American players away from a sports' culture dominated by football and basketball, then hockey has some significant hurdles to overcome.

Purpose of the Study

The purpose of the study was to assess the attitude of African American parents of young children between the ages of 5-10 toward the sport of hockey. The study was initiated at the request of the director of amateur hockey in a state located along the Mid-Atlantic region. The purpose of the research effort was to assist the director in determining some of the issues s/he would need to overcome in the effort to attract young African American athletes to the sport. Since one of the primary requirements for participation in the sport is the ability to ice skate, it is essential that participants begin ice-skating as early as possible; else, the chance of becoming proficient as a hockey player as late as one's teenage years is greatly diminished. By not participating early and becoming proficient as an ice-skater, black athletes thus deprive themselves of potential athletic scholarship opportunities (and perhaps even future careers in the sport). Although the sport has developed outreach programs designed to attract young athletes, most African American parents of young children between the ages of 5-10 years old have not taken advantage of these opportunities.

The study thus investigates some of the possible reasons African American parents of young athletes have not and/or do not steer their young children in the direction of hockey. The current effort is exploratory in nature and focused on assessing African American parent attitudes toward the sport, general awareness levels of black parents concerning hockey's outreach programs (which include knowledge about the availability of hockey clubs, the location of practice facilities, and ice-rinks, etc.), and parent input about how hockey needs to promote the sport. An open-ended section of the survey provided respondents with the opportunity to address any comments/observations they had about the sport.

Literature Review

Variants of Social Cognition Theory (SCT) are often adopted for studies associated with health issues (to include methods to promote physical activity and participation in weight loss programs). The theory typically describes the influence of individual experiences, the actions of others, and environmental factors that impact one's behaviors. Health professionals have used the theory to assist individuals in modifying behaviors in ways deemed beneficial (i.e., such as

weight loss and increased physical activity). Key components of the SCT related to individual behavior change include:

- **Self-efficacy:** The belief that an individual has control over and is able to execute a behavior.
- **Behavioral capability:** Understanding and having the skill to perform a behavior.
- **Expectations:** Determining the outcomes of behavior change.
- **Expectancies:** Assigning a value to the outcomes of behavior change.
- **Self-control:** Regulating and monitoring individual behavior.
- **Observational learning:** Watching and observing outcomes of others performing or modeling the desired behavior.
- **Reinforcements:** Promoting incentives and rewards that encourage behavior change. (<https://www.ruralhealthinfo.org/toolkits/health-promotion/2/theories-and-models/social-cognitive>).

SCT appears to include many of the factors investigated during the conduct of this research and could therefore potentially serve as a model for future investigation when determining the obstacles facing the sport of hockey vis-à-vis the African American community. Each of the factors noted in the model (i.e., self-efficacy, behavioral capability, expectations, expectancies, et.al.) appear to mirror many of the issues black parents potentially face regarding the decision about which sport is right for their young children. While hockey is obviously wildly popular in Canada and in many parts of the U.S, most American sport fans still consider it a “foreign sport.” For African Americans sport fans in particular, lack of basic knowledge about the sport as well as the absence of well-known black players is likely a huge detriment in terms of the relative attractiveness of the sport.

As Wan-Li and Tang's (2010) model previously suggested, a fan's affinity for *any* sport is highly dependent on both the popularity of the sport within the greater culture, and a fan's identity with the athletes who play the sport. America is an ethnically diverse country with many large and growing racial/ethnic sub-cultures, each of which tends to identify more strongly with some sports than others. The Hispanic culture for example appears to prefer both baseball and soccer. It is therefore not coincidental that a high percentage of the players in both sports identify as Hispanic. American blacks, as previously noted, predominate in both football and basketball. Both white fans and white players, on the other hand, are the primarily demographic when it comes to both participation and viewership of the sport of hockey.

During the NFL Anthem Protest controversy, for example, discrepancies in the attitude of fans toward the protest were, in most instances, based on racial identity with the players. Working class white fans of the NFL (the primary fan base) were mostly in disagreement with the movement and this negatively affected their attitude toward the protesting players. Black NFL fans on the other hand, tended to be supportive of both the movement and the players, most of whom were African Americans. Studies conducted by Chaplin and Montez de Oca (2019), and Montez de Oca, and Cho Suh (2019), for example, noted that race-based discrepancies cropped up in university students' responses toward the NFL Anthem protests. White student opinions toward both the movement and the players were mostly negative. Black student opinions were just the opposite (i.e., very supportive). The absence of black hockey players is therefore likely one of the major factors explaining why many African American parents have not responded to

hockey's outreach efforts. The sport simply lacks racial role models that young black child athletes can identify with. Hence, the relatively low popularity of the sport and lack of racial identity with the players may explain some of the lack of interest African American parents' display toward hockey.

While the sport of hockey suffers in terms of black player representation, the absence of black players does not necessarily imply that attitudes toward the sport are negative any more than the current lack of American born blacks in baseball denotes negative attitudes toward that sport. Instead, what the absence of black players likely suggests is that parents of young black athletes simply know very little about the sport. The general lack of knowledge and the virtual non-existence of other African American parents at the practice arena may thus help explain some of the reticence parents feel when invited to participate in the sport. In essence, the lack of knowledge surrounding the sport likely plays a larger role in explaining the absence of interest than any perceived antipathy toward the sport itself.

Conversely, since black players dominate (in terms of participation rates) both basketball and football, knowledge of these two sports, as well as interest levels, are much higher among young black athletes. If the majority of one's peers are gravitating in one or two directions, it is reasonable to expect that parents would go in the direction that serves the child's temperament and interests. While there are a few notable Canadian players who have made it to the NBA, Canadian youth appear drawn to hockey at an early age because it is that country's favorite sport. Canada's geography, climatic conditions, and a ubiquitous supply of hockey rinks makes hockey a natural sport for Canadian youth---and the number of Canadian born players on NHL rosters clearly attests to the popularity of the sport in that country. The same factors that make hockey popular in Canada are absent in most U.S. inner city neighborhoods and/or rural black communities.

As noted, hockey appears to be suffering the same vicious cycle experienced by promoters of baseball. While African Americans do not detest the sport---baseball itself is increasingly becoming a foreign game to many African American parents since the sport requires a baseball field, an organized league, and increasingly expensive equipment. As with most sports, those who eventually advance beyond recreational baseball tend to be part of AAU travel teams that play year round. If a player is not involved in an organized baseball sports league at an early age, opportunities to join a team as a teenager are increasingly limited (Solomon, 2021). Basketball by contrast, can be played alone or with others. Anyone who has access to a goal, a ball, and a pair of athletic shoes can participate in the sport. Pick-up games are not difficult to locate and individuals can find an opportunity to play, morning until evening, in virtually any urban or rural neighborhood.

As previously indicated, hockey does not have a history of widespread black player participation, and one of the reasons likely involves the cost associated with participation (i.e., socio-economic factors). Unlike basketball, the cost in terms of the equipment needed as well as the costs associated with locating and driving to an ice skating arena is quite high. One report indicated that hockey is among the most expensive sports to get involved with since equipment costs, league fees, and travel can reach as high as \$19,000 per year (Doyle, 2020). Because the mean income of white families is roughly 35% higher than the mean for black families, the price of

entry may simply be out of reach for most African American families (Koller, 2019).

Hence, the lack of knowledge, the inability to observe participation by others in their own community, the inability to calculate expectancies/outcomes, and the high cost of joining the sport are likely deterrents. Indeed, all of these obstacles run counter to every behavioral change factor associated with Social Cognition Theory. The authors include a final brief section on other potential issues promoters of the sport of hockey will need to consider if they hope to be successful in recruiting young black athletes to the sport:

Socialization Patterns and Peer group Influences in forming Perceptions: As Goldsmith (2003) previously indicated, socialization patterns and peer group influences explain some of the reasons why differences in leisure and sport preferences exist. When making a decision as to which sport to pursue, black athletes often confront cultural issues that white athletes typically do not face (i.e., such as the sport's acceptability to black culture). Goldsmith suggests that cultural perceptions help explain why participation rates among black athletes is higher in "Black" sports (e.g. basketball and football), and participation in "White" sports (e.g. baseball, and hockey) is higher among white athletes. The perception as to which sport belongs to which group is somewhat self-fulfilling since the perception itself is based on the participation rates of racial groups associated with each sport. Philipp (1995), on the other hand, suggested that practitioners typically overemphasize cultural identity when explaining participation patterns. The lack of participation in some sports, he noted, could just as easily be the result of perceived discrimination in that sport.

The Welcoming Nature of the Sport: Studies investigating the "welcoming nature" of different sports have indicated that many African American and Hispanic athletes feel *unwelcome* in some white dominated sports--a feeling few Whites experience when engaging in any sport. Bopp, Vadeboncoeur, and Aicher (2017), for example, discovered significant differences between Whites and Blacks in the perceived "welcomeness" of the 14 different sports they tested. The findings provide evidence to effect that individuals perceive that some sports "fit" some racial groups better than others. Whether a sport "fits" in with one's racial identity also influences how welcome the individual feels when participating. The authors of the study noted that the results established clear delineation between the sports where black and Hispanic athletes felt welcome versus sports where they felt unwelcome. Understanding the factors that create a welcoming environment for minority players would therefore assist marketers of hockey in breaking down the barriers currently discouraging participation among minority athletes.

Societal Elements and Personal Influences on African American Women Athlete Sport Selection Decisions: Bruening, Pastore and Armstrong (2008) discovered that socialization agents such as parents and siblings are insignificant in terms of explaining differences in white and black female decisions to pursue sports. Mentors, however, play a more significant role in the lives of black females than they do in the lives of white females. Further, receiving support from someone (*a "who"*) plays a more crucial role in black females becoming involved sports than do societal forces. This is not to suggest that societal forces at work in the environments of black women, (i.e., such as the neighborhoods where they grew up and/or the socioeconomic status of their family) play no role. Indeed, cultural forces not only play *an important* role in a determining *which sports* black female athletes choose but whether they will participate in sports

at all. Because mothers in general play a significant role in the sports their children pursue---one of the obvious influencers hockey promoters should be targeting is mothers.

Results

Methodology

The sponsor of the project provided a list of 128 names and email addresses of African American parents who had previously contacted the hockey organization's website. The list of names was divided equally among the students enrolled in the class. Students also emailed a QUALTRICS survey to African American and Hispanic parents they knew with children between the ages of 4-10 years old. Students were also allowed to send surveys to individuals who had children older than 10 but who were currently participating in a sport activity.* Students were required to collect five completed surveys and were given extra credit for any completed survey over that number. The final sample size was 234 (i.e., completed surveys). The demographics are as follows:

- Race: Black 206 (84.4%); Hispanic 11 (4.7%); Other: 17 (7.3%)
- Gender: Male 81 (33.2%); Female 151 (61.9%); Other 1 (.4%)
- Age: Mean = 36.2
- Parent of Children (4-10)*: Yes 107 (43.9%); No 127 (52.3%)

*Technically, the target audience was minority parents with young children. Roughly 44% of the sample indicated they were parents of young children between the ages of 4-10. The survey included the opinion of older adults with children over the age of 10 by asking question items that included the phrase, "in retrospect," allowing respondents to think back to the time when their children were engaged in youth sports at that age.

Descriptive Findings:

- **Involvement in youth sports:** 83.2% of the respondents indicated that their children had been involved in youth sports and 91.6% indicated they were happy that their children had been involved.
- **Travel team:** A majority (51.0%) of those polled indicated that their children had been involved in an advanced sports league/travel team.
- **Awareness of Hockey when selecting a sport for your child:** Nearly 70% of the respondents indicated they were *not aware at all* or *not very aware of the sport* of Hockey when they were selecting a sport for their child to participate in. 18% indicated either some awareness or very aware.
- **Awareness of a local Hockey organization when selecting a sport:** The majority of respondents (82.1%) indicated no or very little awareness of local Hockey organizations, whereas only 8.6% indicated some level of awareness.
- **Had they been aware of Hockey, how likely to participate:** 48.6% indicated that even if they had been aware of the availability of a Hockey program, they would still *not have* recommended the sport. Only 25% indicated that they would have allowed their children to participate in the sport had they been aware of the availability of a local hockey program.
- **Favorite sport:** Out of 5 sports listed (Football, Basketball, Baseball, Soccer, and

Hockey), only 2.9% indicated hockey as their first choice to watch. Hockey was the least favorite sport to watch.

- **Hockey Team Awareness:** 66% of respondents indicated they could not identify the name of an NHL team.
- **Watched a complete game:** Only 38.1% indicated they had watched a Hockey game while 60% indicated they had never watched a game.
- **Attended a live game:** 37% indicated they had attended a game while 58% indicated they had never attended a game.
- **Have you or anyone you know ever played in a game:** 87% said they did not know anyone who had played while 12% indicated having either played hockey themselves or they knew someone who had played.
- **Welcoming Sport:** 48% disagree that hockey is a welcoming sport; 26% had no opinion; 26% agreed that hockey is a welcoming sport.

Results from Preliminary Metric Data Analysis

Factor analysis was conducted on a series of questionnaire items related to one's opinion of the sport of hockey. Two factors emerged, the first of which was labeled "Welcoming" (which relates to one's feelings about the game).

The second factor was labeled "Limitations" (related to impediments to participation). The two factors explained 57.91 % of the variance in the model. The first factor (Welcoming) included the following items (coefficient alpha = .731):

Factor 1: Welcoming

- Hockey seems like a sport where everyone is welcome to participate regardless of race or income,
- Hockey looks like a fun sport to get involved in.
- If my child knew how to play the game, I would feel very comfortable allowing my child to participate in a local hockey league.
- The NC Hockey Association appears to be sincere in their effort to attract more minority players to the sport.

The second factor (Limitations) included the following items (coefficient alpha = .654):

Factor 2: Limitations

- Hockey is only a sport for kids who grew up in the north (where it is colder and the sport is more popular).
- It would cost too much in terms of equipment and travel to make participation in hockey worthwhile for me and my family.
- Hockey is a niche sport that primarily attracts a certain type of player (i.e., someone who mostly grew up in cold areas where there is more access to facilities).

An exploratory T-Test was run on the first factor (Welcoming) to determine whether *having attended* a live hockey game would improve one's attitude toward the sport.

H₁: Those who have attended a live hockey game will have a better opinion of the game (i.e., consider the game more welcoming) than those who have not attended a live game.

Finding: The results indicate that attendees score higher on the welcoming aspect of the game (mean_{ATT} = 3.17) than people who have not attended a game (mean_{no ATT} = 2.68). There is a significant difference (@ p<.001) in the perceived welcoming nature of hockey between those who have attended versus those who have not attended a game, suggesting that attendance at live games improves the opinion of the game. The hypothesis is supported.

If having attended a hockey game improves one's opinion of the sport, then participation in the sport (either as a player or knowing someone who played) is also expected to improve one's opinion of the sport.

H₂: Those who have played the sport of hockey (or know someone who has played) will have a better opinion of the sport (i.e., consider the game more welcoming) than those who have never played and do not know of others who have played.

Finding: Those who have played or who know someone who has played the sport of hockey had a mean score of 3.17 while those who have not played or do not know anyone who has played had a mean score of 2.81. The groups are significant (@ p<.021) indicating that having participated in the game improves one's opinion of the sport. The second hypothesis is supported.

Neither having attended a live game or having played was significant in terms of perceived limitations or impediments to participation.

Regression was run to determine one's predilection toward directing one's child toward the sport of hockey *if it was a viable option* (or had been when the child was participating in sports). The independent variables used were *Welcoming* (i.e., one's opinion as to whether the sport is a welcoming sport) and having *Played* the game (or known someone who had played). Both were significant predictors of whether a parent was likely to direct a child to participate in hockey (Welcoming @ .001 and Played @ .006), suggesting that as knowledge of the sport increases (i.e., participation in the sport), individuals are more likely to consider hockey a welcoming sport. The two factors therefore appear to predict how a respondent might respond to questions about whether they would be willing to direct their child toward the sport.

Conclusions and Recommendations

In addition to the cursory findings above, the authors asked the sample their opinions as to why most African American parents of small children would avoid the sport of hockey. The list below indicated the major impediments they perceived as being reasons for not pursuing hockey (from the top to the bottom reasons):

- Lack of racial diversity (59.6% responded "huge")

- Lack of minority role models (57.7% responded “huge”)
- Lack of availability (56.3% responded “huge”)
- Lack of awareness/familiarity with the sport (42.6% responded “huge”)
- Other sports (32.9% responded “huge”)
- Affordability (32.4% responded “huge”)
- Too foreign (unfamiliar to AA youth) a sport (24.1% responded “huge”)

When asked to rank the most effective promotional technique to attract the attention of the parents of young children to the sport, the following items emerged:

- Free tickets and transportation (for elementary schools children) to see an exhibition game (69%)
- Hockey sponsoring minority youth leagues (68%)
- Providing discounts to live hockey games (63%)
- Hockey player visits to elementary schools (62%)
- Field trips to ice-skating rinks (56%)
- Advertising on minority radio channels (53.5%)
- Billboards in minority featuring minority players in minority neighborhoods (50%)

Hockey participation suffers in the African American/Hispanic community for a number of reasons but the major problems now appear to center around the following areas: The sport lacks diversity/black player role models (and is therefore viewed as unwelcoming); There is a lack of awareness of the available local teams (and for the sport itself); The cost to participate is perceived to be too high; and, The lack of access to facilities (i.e., the location of most ice-skating rinks makes commuting to and from practices too difficult. A geographic assessment of the location of ice skating rinks indicated that most are located too far away from most African American communities).

Whether fair or not, Hockey’s lack of awareness among minority members contributes to negative perceptions---including the fact that most parents believe that hockey is not an inclusive sport. African American families with minimal exposure to the sport, however, have a more positive opinion of hockey than those with no exposure, particularly if they have played the sport or who know someone who has played the sport. Indeed, those who have participated in Hockey are many times more likely to have a favorable opinion of the sport than those with no exposure. Our recommendations include but are not limited to:

- 1) The need to create a spokesperson for the sport who the community can identify with.
- 2) The need to identify/locate families with hockey background/experience.
- 3) The need to engage in “Personal Selling” (which along with sponsorships and free tickets appeared to be one of the more effective methods to promote the sport).

The first recommendation provided is that Hockey urgently needs a minority spokesperson as the “face” of hockey in the African American community. Although the findings initially seem bleak, an estimated 10%-25% of African American families with young children could be part of the potential market. Hockey representatives will therefore need to engage in significant personal outreach programs in order to overcome the lack of knowledge for the sport as well as to

overcome the perception that the sport is unwelcoming. One of the overarching problems for hockey will still be the location of ice-skating rinks as our research indicated that most black families live farther away from these facilities than do white families, thus substantially increasing driving times for practices. These challenges are not insurmountable, particularly if hockey organizations at every level put their effort into identifying individuals who love hockey but who just happen to be black. African American parents do not hate the game---they simply know very little about it.

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Navigating Copyright and Fair Use in Social Media

BEST ABSTRACT IN TRACK

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Abstract

Social media can be a challenging business to get into regarding Copyright and Fair Use. This paper will discuss Copyright and Fair use, as well as two problems that influencers often run into when creating content protected under copyright regarding other companies and for the influencers themselves and Fair Use when using other people's work to create content on their social media (Chan, 2016).

Keywords: Social Media, Copyright, Fair Use

Relevance to Marketing Educators, Researchers and/or Practitioners: Effectively leveraging social media in marketing strategies and ensuring compliance with legal standards.

Social Media

Social media is an interaction between people in virtual communities. There are many different types of social platforms, such as social networks like Facebook, that allow families and friends to keep in touch with each other. Discussion forums are platforms like Reddit where people can talk about movies, shows, or other topics they enjoy. Another popular type of social media site is consumer reviews. Websites like Yelp allow people to get reviews of businesses and make decisions about how they wish to interact with the company. Arguably, the most popular type of social media type is media-sharing networks. This includes apps such as Instagram, Snapchat, TikTok, and YouTube. These platforms are home to many social media influencers, also known as people who have gained a following and use the following to partner with brands to influence their followers' lifestyles and consumer behaviors. As the profession of being an "influencer" has been created and many people are creating original content, people must become more aware of copyright and fair use laws ("What is Social Media?", 2023).

Copyright

Copyright can be tricky to understand if you are not careful. Copyright "grants the creator the sole right to publish, reproduce, sell, display, perform and prepare derivative works for their original works ("What is copyright?", 2023)." This can be things such as books, poetry, and songs. Copyright does not cover rights when used for fair use content. The person who holds the Copyright is the person who earns the money from the product. The length of copyright protection has changed many times since the law was created, but the most well-known is the lifespan of the creator of the copyrighted material, plus 70 years. Copyright protects original, written, and other forms of tangible work. In March of 1989, copyright became automatic. It must be creative work like dance, photography, and painted artwork. Some things cannot be protected, for example, an idea. Copyright cannot be placed until the idea is tangible, like in writing. Another thing that cannot be copyrighted is anything that is not creative, such as facts.

Government publications cannot be copyrighted either. The titles of books cannot be copyrighted, nor are works in the public domain. Methods or the process of doing something also cannot be copyrighted. Finally, some things can be patented in fashion, but it would be up to the court (“What is copyright?”, 2023). To get a Copyright, you must file with the Copyright Office and pay the 35–55-dollar fee. It would also be wise to make sure that your item is Copyright-eligible. Finally, file a copy of the material that you want to copyright (Rittenberg, 2023).

Fair Use

Fair Use is a legal doctrine that allows people to use copyrighted materials under particular circumstances to promote freedom of expression. Section 107 of the Copyright Act provides the guidelines for what is to be considered Fair Use and uses for the work such as criticism, comment, news reporting, teaching, scholarship, and research. The guidelines also warn about making sure to look out for four factors. The first factor is the “Purpose and character of the use, including whether the use is commercial or is for nonprofit educational purposes (“U.S. Copyright Office Fair Use Index”, 2023).” The court will look over how the material is being used, and if it is deemed non-profit educational use or non-commercial, then the claim will most likely be deemed fair. This is often up to the individual interpretation. The work must be deemed transformative to be deemed fair. The next factor is the Nature of the copyrighted work. This means that work used to express a creative idea, such as a novel, and someone using it to create another source of entertainment will be less likely to be deemed fair than factual works. The third factor is the “Amount and substantiality of the portion used about the copyrighted work as a whole.” The court would examine the amount of copyrighted material used to determine if the work is fair. The more considerable the work used, the less likely the work would be deemed fair use. The final factor is the “Effect of the use upon the potential market for or value of the copyrighted work.” This is where the court would look over the stricken work to determine whether the work hurts the chances for the future market. Fair use is tricky and often left up to individual interpretation, making lawsuits and enforcement almost impossible (“U.S. Copyright Office Fair Use Index”, 2023).

Conditions of Social Media Copyright

When working in social media, content is constantly created. Just like every other tangible creative work of expression, the media created is allowed to be copyrighted. When a creator's work is posted on social media, the creator can hold a copyright if the work is eligible. The creator's work cannot be used without permission from the creator, nor can the platform own the content to sell to other people. Of course, there are exceptions for platforms such as YouTube. When a creator signs up for an account, they agree to the “terms of service (“Terms of Service”, 2023),” which gives YouTube the right to use the creator's work. It also allows the creator's work to be shared inside YouTube's platform. This can be seen when people remix YouTube Shorts. While people can repost the creator's content, something must be contributed to the work. If work is posted outside the original platform or without something attributed to the content, it would no longer comply with “terms of service (“Terms of Service”, 2023).” Copyrighted material cannot be posted on social media without permission or being transformative. When posting things on social media, it is best that creators use content from the public domain. Even though copyright is created as soon as work is posted, it would be best if a creator wants to protect their work; they should put a copyright notice on each work they decide to publish (Sember, 2022).

Stolen Content from Social Media

When you are an influencer and post many photos and videos, especially if you hold products, your picture can be stolen easily and used to create ads by a company. Often, make-up influencers get their image stolen because they hold and use many standard products (Ellis, 2020). Make-up influencer Tati Westbrook has been vocal about her experience of ads taking her image. Many websites like Amazon, Facebook, and Wish, where low-cost companies run rampant, were taking screenshots of her thumbnail or video and using it as the product image to promote higher sales. At times, they do not just take her image, but they also take her voice. Glam Girl's company took a voiceover of her talking about a product she raves about and uses it to promote their eyeshadow. In her video, Tati talks about how she could get lawyers involved and get the companies to take ads down, but so many companies and ads use her image and voice that it would be unreasonable. Instead, she said, "If a company is going to use my voice and image, then I will tell everyone about it and call them out (Westbrook, 2018)."

Unfortunately, Tati is not the only influencer who experiences these problems. YouTube influencer Sierra Schultzzie. When she sees herself in an ad, she reports the ads to the platform and asks others to do so. She will even loop in with her manager. Most of the time, nothing will happen. If something does, it gets reposted under another account. She says that there are annoying ads that are harmless, just as her being shown trying on jeans that are nothing like the jeans being advertised. Known for being a body-positive influencer, she was in diet and weight loss ads. She would often be the before photo, and another person would be the after. She is vocal about loving yourself and being confident at whatever size you are and her face being and stated that "these ads are the antithesis that I stand for and everything that I am fighting against with my channel (Schultzzie, 2020)." She hates that the company targets her viewers and uses her image to make people feel they need to stray from the confidence journey she is helping them on. She put out a video to help the people who are vulnerable on her channel to know that they are not her or the message she wants to spread and encourages her viewers to report them (Schultzzie, 2020).

Not only do people's faces get taken and used for a product, but influencers like Simply Nailogical, a nail art YouTube channel, will often have their designs taken for ads. She has added a watermark to the bottom of her videos to combat this. She puts her social media handle and the name of the video in white text at the bottom of the video to deter companies from taking screenshots (Harris, 2023).

Celebrity Copyright

Social media influencers are not the only people who deal with their image being used by others. Celebrities have their picture taken almost every time they leave the house by paparazzi. Photos are also taken at significant events, such as movie premieres, for companies to use in articles. When it comes to pictures of yourself, you would believe that you could post them, but that is not always the case. In April 2020, Jennifer Lopez was sued by Steve Sands. According to the court documents, Lopez and her production company, Nuyorican Productions, for copyright infringement and seek an excess of \$150,000 in damages. The documents state that Lopez posted the photo taken of her by Sands. He said Lopez used the photo without permission to "promote their brand" to their Instagram followers. The lawsuit states that "Defendants did not license the

Photograph from Plaintiff for its Website, nor did Defendants have Plaintiff’s permission or consent to publish the Photograph on its Website (Scott, 2023).” Sands believes that he is entitled to 150,000 dollars’ worth of damages. This is not the only time Jennifer Lopez has been sued for copyright infringement. The lawsuit was filed in Manhattan, and the lawyer for the Plaintiff, Richard Liebowitz, stated, “This is an example of celebrities using photographers’ photographs without permission to brand themselves on social media. The number of likes the photograph receives, and their number of social media followers is a tool to commercialize their posts (Scott, 2023).” Splash News and Picture Agency filed the lawsuit for a picture of Lopez and Rodriguez holding hands while walking on a sidewalk. Since this is creative property taken and published by the Splash News and Picture Agency, Jennifer Lopez did not have the right to copy and distribute it for gain (Scott, 2023).

Reaction and Commentary Channels

YouTube has many channels providing a wide range of content for different genres and interests. Two different types of channels have to be careful regarding copyright: reaction and commentary channels. Though they have similar concepts, they are very different. Reaction channels are channels where one or more people watch a video and react to it. Reaction channels cover many genres, such as drama, film, TV, and unboxing. The videos often have no pre-planning, and the main content is changing facial expressions and audible laughs. Popular reaction channels include BlastphamousHD TV2 and Tyrone Magnus. Commentary channels include a bit of the reaction element but layer on top of well-thought-out opinions and intense research. There are many types of commentary channels. D’Angelo Wallace will cover many things like movies and music (Carlson, 2023). Savannah Marie is a commentary channel that posts about multi-level marketing companies’ content (Marie, 2023). Then, finally, Apathetic Faxx, which is a YouTube channel that makes reactions to lifestyle creators on the YouTube platform (“Apathetic Faxx”, 2023).

YouTube Copyright Rules

YouTube has its copyright rules laid out on its website. It states, “Creators should only upload videos they have made or are authorized to use (Copyright Rules & Policies, 2023).” This is important because it states that YouTube wants creators to put their work, not someone else’s. Of course, because YouTube is a platform, there is an exception. That is where the page goes into describing the fair use law. It points out that laws differ in each country, and decisions are made on a case-by-case basis. They want creators to think worldwide when they submit a copyright strike or ask for the removal of a copyright strike. If a creator decides that they need to make a claim, creators are allowed to do so through YouTube. They can do one of two things: block the video from being viewed or take the monetization for the video. A strike is only applied when monetization is taken. Once a YouTube channel has three strikes, then the channel will be removed. A copyright strike can be challenged and may resolve itself in 90 days. If not, YouTube cannot help much because it defers the creators to go to court (Copyright Rules & Policies, 2023).

Copyright Strikes

An example of a channel is Apathetic Faxx. This commentary channel uses clips from a person’s video and does voice-over commentary (“Apathetic Faxx”, 2023). Faxx tends to do a lot of videos on a YouTube creator, Amberlynn Reid, a “weight loss” channel that often has a lot of

lying behind it (Reid, 2023). Amberlynn saw the Apathetic Faxx's channel and claimed that the channel re-uploaded her videos in total. She then decided to strike the videos. Apathetic Faxx responded on her channel's community page, "So I was struck for 8 videos leading to 3 copyright strikes. I submitted a counter to YouTube, which then reviewed it before they sent it to Amber. I was rejected by YouTube four times. I submitted my info because I don't care that she knows who I am...it was rejected. I did that 3 more times, and all were rejected. Now, my channel will be terminated in the next few days by YouTube (3 strikes and ur (sic) out). Yes, A LOT (sic) of my videos fell under Fair Use, but it seems some didn't, and that is why the strikes are staying put, and my channel will be gone. People telling me I'm not even trying to fight are so so (sic) wrong. I love my channel and my subscribers, and you have no idea how hard I have been fighting behind the scenes (Suu, 2021)." After the appeals process with YouTube, nothing could be done on YouTube's side. Amberlynn ultimately took away the strikes after she received backlash from her community. This is an excellent example of how one-sided fair use and copyright strikes. It relies on the creator who feels slighted if the law will be carried out fairly or used to boost one's vanity (Suu, 2021).

Savannah Marie is a commentary channel that often talks about multi-level marketing companies, also known as MLMs. She often makes commentary on individual marketers but sometimes will talk about the companies as a whole (Marie, 2023). She made many commentary videos on a defunct company, Black Oxygen Organics. She pointed out many things the company did not like in her video, such as their income disclosure statement. It is a graphic that shows how the sellers of the products make money. She pointed out that you cannot make money just from selling the products but must also recruit people to create profit. She also pointed out how many representatives were making health claims of what the mud could do, such as clear up a cold to eliminate skin cancer. All claims that Savannah pointed out are illegal for the representatives to make. She also alleged that the mud they were selling came from a bog. She used evidence given by the company to show how the location they claimed to use was protected land and that they could not be getting mud from there. She used evidence to show where she believed they were getting the mud they sold, close to a landfill (Marie, 2021). Of course, the company did not like this information being spread. This resulted in Black Oxygen Organics sending her a cease and desist. They claimed that she was using public use copyrighted material to make false statements. While Black Oxygen Organics did not go through YouTube to get the video taken down, they went through the legal route. The legal document was full of mistakes, so Savannah did not take it seriously. She stopped talking about Black Oxygen Organics because legal procedures are expensive, and did not want to escalate things further. She did, however, write a response proving how everything she said and showed was not illegal. But the company shut down, and she proved what they said wrong. The company did shut down, so there were no further legal actions taken toward Savannah, but this is one of the many times that this has happened (Marie, 2021).

Savannah is now so used to being threatened by companies and people by copyright laws that she now puts disclaimers in the front of her videos. A video she posted about McKamey Manor had a long section at the start of the video explaining why it is fair use. According to Savannah, many of McKamey Manor's followers were going to videos made about the horror attraction and mass reporting videos. She laid out YouTube guidelines for using clips from other YouTube videos according to their guidelines and how all of the clips she uses fall under fair use, pointing

out that it is not just a reupload version of the video but that she takes clips and adds transformative commentary with it. She is an independent journalist compiling information together (Marie, 2023).

Lawsuit

The H3H3 Podcast is a popular YouTube channel Ethan Klein and his wife Hila run. He has been known for his commentary reactions for years and has earned many followers. Matt Hosseinzadeh, proprietor of the MattHossZone channel, decided to sue the channel after they posted a video reacting and mocking a MattHossZone “parkour girl.” Hosseinzadeh claimed that Klein used over seventy percent of the video, and there was no transformative content. There was an attempt to settle with Hosseinzadeh, asking for four thousand dollars. Klein refused because the video was in fair use, and he did not want to back down from a monumental fight (Spangler, 2016). This lawsuit can be seen as a betrayal from the YouTube community, with many creators being copyright claimed by “bullies” all over the internet (Chan, 2016). Many YouTube creators also agreed with Klein's sentiment because the creators raised over one hundred thousand dollars to help with legal fees (Spangler, 2016). The Kleins also created a fund for other creators who needed help called the Fair Use Protection Account. YouTube has a neutral copyright policy relying on the creators to resolve conflicts. This court case would change the thought process before people could go after channels (Chan, 2016).

On August 23, 2017, the Kleins won their case. This was a victory for YouTube creators as a whole. If the case had not won, ramifications would have been felt across the internet. Many lawsuits would have been filed, and many avenues of free speech would have changed forever. Judge Katherine B. Forrest dismissed the lawsuit by Hosseinzadeh over copyright infringement, misrepresentation, and defamation. She stated, “Any review of the Klein video leaves no doubt that it constitutes critical commentary of the Hoss video; there is also no doubt that the Klein video is decidedly not a market substitute for the Hoss video. For these and the other reasons set forth below, defendants’ use of clips from the Hoss video constitutes fair use as a matter of law (Eordogh, 2017).” Judge Forrest highlighted many aspects of the video, such as the commentary on the costumes and scripts. Forrest noted that “‘criticism’ and ‘comment’ are classic examples of fair use (Eordogh, 2017).” While there will inevitably be more fair-use lawsuits, this lawsuit changed the precedent of what is considered fair use on YouTube and helped creators learn their rights to what they can legally post (Eordogh, 2017).

The H3H3 Podcast's legal victory set an important precedent for the YouTube community, reinforcing the importance of fair use in protecting free speech (Eordogh, 2017). Legal aspects of content creation will remain a significant concern. Creators and influencers must be proactive in understanding their rights (Sember, 2022). The creators must deal with complex copyright and fair use laws. Creators are given the right to their work and must understand the laws when others use it. Reaction and commentary channels face unique challenges, with fair use playing a fundamental role in determining the legality of their content (Sember, 2022). Social media has become a growing career for many people, with a large amount of content being made every day. YouTube, TikTok, and Instagram are platforms that are posted regularly (“What is Social Media?”, 2023)

Conclusion

Copyright and fair use are not the only issues creators have to be on the lookout for, but AI as well. There has been a rise in complaints that AI is stealing art people post on their social media accounts without payment or credit. AI created many different pieces of art, but the full scope of pieces that have been stolen is not fully known. There is also the conflict of who owns the art that the AI created, which the court will soon decide. Once the court decides it, the process of how rights will be attained will form from there, and many new copyright and fair use laws will be created (Marr, 2024).

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Track: Student Submissions

ID#: 1097

Silence vs. Music: Which is Better for Brainstorming?

BEST PAPER IN TRACK

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Abstract

Since the 1990s, there has been a creativity crisis among American youth. A drop in creativity undoubtedly creates concerns among marketers. From writing ad content to brainstorming new products to designing research, a loss of creativity will be felt from CMOs to social media coordinators. Although researchers agree that our over-scheduled, electronic device-filled lives are at the root of the problem, there is considerable debate about best practices to nurture creativity. This research addresses a central disagreement in creativity research: is silence or classical music better for brainstorming? In this between-subjects experimental design, we test if silence or classical music results in more brainstorming ideas, finding silence significantly better for idea generation than classical music.

Keywords: Creativity, Brainstorming, Silence Vs. Music

Relevance to Marketing Educators, Researchers, and/or Practitioners: Creativity is a key characteristic of any successful marketer, from CMO to advertising executive to marketing faculty. However, the US has had a creativity crisis since the 1990s. This research finds that silence is better for brainstorming than listening to classical music, resolving one debate over best practices in nurturing creativity and suggesting whether writing ad copy or a research paper, silence is best.

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Track: Student Submission

ID#: 1095

Ways Social Media Effects Multi-Level Marketing Companies

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Abstract

Multi-level marketing (MLM), also known as network marketing, involves selling products through independent consultants rather than retail outlets. This business model, promising financial freedom and flexibility, has been controversial due to its resemblance to illegal pyramid schemes. MLMs require consultants to recruit others, creating a pyramid-like structure where income is often derived from downline sales and recruitment. To be legal, MLMs must primarily generate revenue through product sales to non-distributors, but many emphasize recruitment (Napoletano, 2023). Social media, especially Facebook, plays a crucial role in MLM marketing, with live streams replacing traditional sales parties (Housel, 2019). Despite the allure of perks like luxury cars and trips, these often come with hidden costs, challenging the promised financial independence (Surez, 2020). The anti-MLM community on platforms like YouTube and Reddit provides critical insights, debunking MLM claims and highlighting the risks. This community serves as a valuable resource for potential recruits, educating them on the pitfalls of MLM involvement. As MLMs increasingly target younger demographics, the anti-MLM movement's role in exposing misleading practices and the true cost of participation becomes ever more significant (Weekman, 2021).

Keywords: Multi-level Marketing, Pyramid Schemes, Consultant Selling, LuLuRoe

Relevance to Marketing Educators, Researchers and/or Practitioners: A critical look at Multi-Level Marketing

What is an MLM?

Multi-level marketing, often known as network marketing or MLM, operates by selling products through independent consultants. These companies attract individuals with the promise of time, freedom, and financial independence. However, they are often controversial due to business practices resembling illegal pyramid schemes. This controversy stems from the fact that in an MLM, products are sold through individuals rather than retail outlets, with these individuals acting as distributors. Legally, MLMs cannot employ these distributors. Instead, they become independent entities that recruit others into their downline, relying on this downline to generate revenue. To fully comprehend how an MLM operates, imagine a pyramid. The first person to join the company is at the top, and they recruit others beneath them, forming a multi-layered structure similar to a pyramid. The company's compensation plan is based on the number of people in their downline and the volume of products bought and sold (Napoletano, 2023).

MLM vs. Pyramid Scheme

While MLMs and pyramid schemes may seem alike, specific legal requirements set them apart. The Federal Trade Commission stipulates that a legitimate MLM must primarily generate revenue through product sales to retail customers, not by recruiting new distributors. An MLM

must ensure that at least 70% of its sales are to individuals not part of the company's distribution network to avoid being labeled a pyramid scheme. Moreover, a significant portion of sales must originate from outside the company. This distinction is vital, as it is often challenging to verify these sales due to the independent status of distributors, who must be trusted to report their sales figures accurately. Despite the emphasis on sales, the compensation plans of many MLMs suggest that substantial income is more likely to be derived from recruitment rather than sales alone, raising questions about the practicality of achieving 'financial freedom' through product sales (Napoletano, 2023).

Stacking

When working for multi-level marketing, many consultants realize the potential that comes with recruiting and having a large team. The higher they rank in the company, the more money and perks they will earn. This leads people to start “stacking”. Stacking is when a consultant signs a new distributor, and they will place them under a distributor already signed up under them instead of becoming their personal sponsor. Stacking enables a consultant to increase in rank more quickly because when a downline ranks up so does the consultant's rank up. This allows consultants to rank more quickly because when downlines rank up, leaders do as well. This is often not allowed in many MLM companies, though many overlook it for profit (Redman, 2016).

MLM Hopping

Being a consultant in an MLM business does not guarantee earning money, and compensation plans can change unexpectedly. This leads to people hopping from one MLM to another. This can happen because people are often looking for instant success, and once one company has proven not to give them money, they will change to a new one until they find the ones that give them the desired success. Many times, consultants who are successful in companies but do not like the compensation plan will move to a new company in hopes of earning more money. When they move, they will also convince their downline to go with them so they do not have to create a new downline from scratch. Though it is also against many companies' policies, consultants find many ways around the rules. A group that is famous for this is WFABB. They were a group of top leaders in Monat who wanted to make more money, so they moved to a cryptocurrency, MLM Igenius. While they did earn money moving companies, they did have to deal with the fallout of losing part of their downline (James, 2021).

Examples of MLMs

LuLaRoe

LuLaRoe is one of the most infamous MLMs, having a crazy rise and a tremendous fall. LuLaRoe was founded in 2013 by Mark and DeAnne Stidham. They were known for their soft leggings with bright and colorful patterns. In 2015, with the rise of the “girl boss” era came many women hoping on livestream to sell printed clothes. There was a high price tag to join, with the base package being 5,000 dollars. When the company first gained popularity in 2015, there were only 1,000 consultants, but by April 2017, they had grown to 80,000 consultants. As more people joined the company, the chance to make money became smaller and smaller. LuLaRoe offered financial independence and the opportunity to “retire their husbands,” but many people lost money, and the dream of “being your boss” was lost. LuLaRoe is still in business today, but long gone are the days of private Katy Perry concerts; now, they have fewer consultants and a much smaller start-up fee (Gajanan, 2021).

Scentsy

Scentsy is another popular MLM that is known for selling fragrance products. It was founded in 2003 by Kara Egan and Colette Gunnell. They made a couple of wax bars and then had a party to share their new creations with many other people. In 2004, Heidi and Orville bought the company and made it into the empire that it is today (Scentsy, 2022). In 2010, they were awarded the Rising Star award for a new direct-selling company. In 2011, they expanded into European countries and, over the next ten years, added many more. They are one of the rare MLM companies that do not have a lot of controversy around it (Zoretic, 2016).

Monat

Monat was founded in 2014 and relies on Monat partners to sell their products. They sell vegan and cruelty-free products, including shampoos, conditioners, serums, oils, masques, hair spray, and pet products. Most bottles start at 35 dollars, and Monat partners often try to get people to sign up for the VIP Program, where people would get a regular shipment of products. While Monat makes the Monat products and the market partners program sound like a great way to earn money, Monat has been through 15 different lawsuits with claims of “significant hair loss,” “scalp injury,” and “scalp irritation.” Many market partners returned with these claims by saying it was just their hair “detoxing.” Despite this, Monat is still popular among MLM hoppers and is a successful business (Lenninger, 2020).

Facebook

Facebook has become a crucial platform for network marketing, especially for Facebook Groups and Live. When consultants start a business, most people will start a Facebook group. Facebook groups allow people to create a hub to visit if they have questions and advertise their products (Brookes, 2024). Once they find people that they believe belong in their group, they will add them. They often try to find a niche group of vulnerable people, such as moms. This allows them to find people and create a relationship with them. They are encouraged to post often and ensure that every post is positive. Many people were told never to post anything negative because it could look bad on the company. They encouraged many people to have a “fake it till you make it attitude (Lee, Kosciulek, & Silverton, 2019).” Even if your life is not going well, many companies will encourage you to post as you are to get more people. When doing this on Facebook, representatives would post how happy they were with their families, even if they were struggling financially. Many reps would post about vacations on Facebook and claim that it was because of the company that they work at (Lee, Kosciulek, & Silverton, 2019).

Facebook Live

Facebook Live changed the way that network marketers advertised and sold their products. When companies like Mary Kay and Tupperware were formed, the products were sold at parties. Women would bring their massive piles of stock to a friend’s house and sell it to the women at the party. Times have changed, and events like the pandemic have taken over the world, affecting network marketing. Parties have now been replaced with Facebook Lives. The representatives will show off all their stock from their house while people watch from their homes. Representatives save money since they are not incurring travel or party food expenses (Admin, 2022).

The company that pioneered the use of Facebook Lives is LuLaRoe. They are known for their

patterned leggings and colorful clothes. While they still had many at-home pop-up shops, LuLaRoe often encouraged their representatives to sell via Facebook Live. The reps would put all their potential customers in a group and inform them of the selling time. Then, they would host lives, sometimes daily, showing off all the clothes they have in stock. Many times, people would be looking for “unicorns” in the Facebook lives. “Unicorns” are LuLaRoe garments that were made with popular patterns. Limited garments were made with that pattern or color and not every consultant would get each pattern (Housel, 2019). This allowed LuLaRoe to focus on scarcity marketing. Many people were scared of missing out, so when the customers saw a garment they liked, they quickly typed sold in the chat, and the rep would take it out of the lineup (Barron, 2023). LuLaRoe thrived off of Facebook Live because its products could quickly be sold on the internet and have a wide viewing audience. Facebook Live is an excellent tool for network marketers but is not always the best.

Guidelines and Consequences

Instagram is the platform that has one of the harshest guidelines for people working in MLMs. They have a guideline that states, “You can’t do anything unlawful, misleading, or fraudulent, or for an illegal or misleading purpose (“Community Guidelines”, 2024).” MLM posts and videos typically fall under misleading, especially with the income claims many consultants post to get people to join their teams. Instagram only responds to taking down posts and receives many reports against the post. This often means that only infamous MLM consultants will have their posts taken down compared to the average person. In rare cases, if a post or account is reported enough, Instagram will take down the account (Masango, 2022). Though Instagram has been taking down more anti-MLM Instagram accounts then, they have been talking down accounts that promote MLM (Anderson, 2024).

Company Guidelines

Not only does social media have guidelines for what can be posted on their platforms, but each company has specific guidelines for what can be posted on each consultant's social media. Companies have policies such as making accurate product claims by not posting health claims that have not been researched or approved by an outside agency. This is common among essential oil MLMs such as DoTerra (Gressin, 2022). They are also not allowed to post income claims. Consultants cannot comment that they will make a certain amount of money. Instead, they encourage the consultants to say unlimited earning potential (Heras et al., 2024). Many consultants will host “training” for their team, giving many tips and tricks on how to do well in the company. However, this can also easily lead to careless leaders sharing incorrect information. This has been the downfall of many consultants, with many consultants in LuLaRoe being let go after live streams criticizing the patterns of being plagiarized (Lous, 2019). LuLaRoe also got in trouble with the courts because of their training, which unintentionally explained how the company was being run like a pyramid scheme (Nason & Furst, 2021).

The Anti-MLM Community

The Anti-MLM Community is a community of people who have previously been involved in or are interested in scams that warn people against the dangers of multi-level marketing. The creators will react to videos often calling the women staring in them “huns” because they start their cold messages, which are messages sent to a person with no previous contact with the phrase “hey hun (Dodd, 2022).” The videos will often go over income disclosure statements and

reveal how the consultants were faking their success in the company and how they prioritized recruitment over the sale of products. Many creators often share personal stories and debunk claims in hopes of helping people not join the company. The most popular platforms the anti-MLM community uses are Facebook, YouTube, Instagram, and Reddit. Many people will often criticize the anti-MLM movement because they believe that people are bullying people in the MLM company for entertainment (Percy, 2023).

Creators

Chelsea Suarez is a popular anti-MLM creator. She previously worked in sales and has a background in psychology. She uses this knowledge to review videos and point out the marketing tactics and scams consultants use to get you to join their team. Isabella Lanter is another popular anti-MLM creator who uses her background in marketing to point out the illegal tactics they use in their marketing. Some of the most common anti-MLM creators on platforms are people who have been in an MLM before and tell their audience about their experience in marketing, team meetings, being a leader, the truth behind the products and the high prices, and the team sales goals that have to be hit every month. Jessica Hickson was a previous consultant for the company “It Works!” They were famous for their plastic wraps that would shrink body fat. She uses her YouTube channel and TikTok to talk about ways people would keep in the company, such as guilt, and talks about how the products that are supposed to be “healthy” actually do nothing or harm your body (Weekman, 2021).

Importance of the Anti-MLM Community

For many years, MLMs have focused on recruiting single or stay-at-home moms trying to earn an income while caring for their kids. This was especially popular when MLMs like Tupperware and Avon were at the height of their popularity. As times have changed and social media has become popular, a new demographic has been targeted. College kids, or Gen Z, have become the new marketing target since the global pandemic, and it was hard for new college graduates to find a job.

As MLM advertising becomes solely online, consultants have been looking for younger and tech-savvy people. People will advertise becoming a “girl boss,” being able to own your own business and make unlimited earning potential. The young women are often inexperienced and do not know how to decline respectfully, instead getting pulled into the company (Weekman, 2021).

Debunking the “Perks”

Many MLMs offer perks to draw subscribers, such as trips, but luxury cars are among the most popular perks. Many people will advertise that the company will pay for them to drive a luxury car. When people reach the rank where they have earned the car, they often cannot pay for it. Suarez mentions that the company does not pay for the car. The car is under the consultant's name, not the company's. They do not pay the car note in full. Instead, they send the consultant a certain amount of money based on their rank in the company. Since the company requires people to have certain cars such as Monet, which requires that the car not be three years old and must be a white Cadillac, and Arbonne's white Mercedes Benz, these cars are not affordable, and when people first earn them, they are often given \$500 for the car note. Often, there is not enough time to cover the entire bill, but many leaders will hide this from their audience to give off the

impression that they are thriving in the company.

Then, various trips are “earned” by the consultants. Most often, beach trips to Mexico are plastered across their media feed. The highest-ranking consultants often made the most videos showing how they would have big rooms and branded gifts waiting for them while bragging about their free flights. Suarez points out things that they are not telling you, such as that people who are ranked lower in the company can still earn trips, but they often will have to pay for their flights, share the rooms, and foot the bill for food and other excursions that are planned for the trip. Even the high-ranking consultants who had everything “paid for” will still be required to pay a hefty gift tax, meaning the trip is not free. Flights are also paid for but often put on budget airlines (Surez, 2020).

Conclusion

MLM companies entice individuals with promises of financial freedom and flexibility. However, their controversial business model, similar to pyramid schemes, has drawn scrutiny. MLMs rely on independent distributors who recruit others into their downlines, creating a hierarchical structure where commissions are earned from sales and recruitment. MLMs must derive revenue from product sales to retail customers to avoid being considered pyramid schemes. Despite this, many MLMs emphasize recruitment over product sales (Napoletano, 2023). Social media platforms like Facebook have become essential to MLM marketing, with live streams replacing traditional sales parties (Lee, Kosciulek, & Silverton, 2019). The emergence of the anti-MLM community on platforms like YouTube, Instagram, and Reddit provides a voice of reason to MLM narratives. Creators within this community debunk marketing tactics and share personal stories to educate others about the risks of being in an MLM. As MLMs target college students and Gen Z, debunking the perceived perks, like luxury cars and trips, becomes crucial (Weekman, 2021). Many of these perks come with hidden costs, often not mentioned by MLM leaders, to maintain an image of success (Surez, 2020). Ultimately, the anti-MLM community serves as a valuable resource for individuals considering joining an MLM, and social media has become a tool that has changed how MLMs advertise and a new way for people to be warned of their scams (Weekman, 2021).

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Track: Student Submission

ID#: 1096

Behavioral Intention, Perception Of Potential Displacement and Willingness to Adopt Suas: Marketing Strategies Utilizing the Theory of Planned Behavior

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Abstract

During this study, the researchers will explore individual perceptions contributing to the adoption of small Uncrewed Aerial Systems (sUAS) within the aviation industry. The utilization of the Theory of Planned Behavior (TPB) was espoused as a foundation to generate insights into the marketing implications of sUAS integration. Data will be developed using a Qualtrics survey administered via Amazon Mechanical Turk from participants employed for more than one year in the aviation sector. A quantitative analysis was then conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) to measure three sets of grouped constructs: Human Cognition, Planned Behavior, and Industry Impact, and their influence on Behavioral Intention, Potential Displacement, and the eventual Adoption of sUAS. Exploration of our findings will allow for the development, refinement, and implementation of effective marketing strategy by logically connecting TPB and consumer behavior to their respective marketing concepts. Contribution to the existing literature and the industry will be generated through the additional understanding of how consumer behavior drives sUAS adoption in aviation, and the creation of industry stakeholders' strategies that will impact the effective integration of this technology.

Keywords: Consumer Behavior, Theory of Planned Behavior, Small Uncrewed Aerial Systems, Aviation, Product Adoption, Strategic Marketing, Disruption, Displacement.

Relevance to Marketing Educators, Researchers, and/or Practitioners: Historically, the integration of new technology and the resulting aftereffects on humans have been an afterthought to academics, policymakers, government officials, and business owners. As a result, many studies miss a vital opportunity to explore human behavior before the saturation of technology in specific industries. This study seeks to offer insight into how individuals with recent experience working in the field of aviation perceive: their intention to use sUAS, their potential displacement as a result of sUAS integration, and ultimately their willingness to adopt sUAS. By first clearly understanding the factors that either preclude or encourage individual adoption of sUAS, the researchers expect to expand the existing body of knowledge within the fields of technology adoption, consumer behavior, and strategic marketing.

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