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AN EXPLORATORY STUDY OF RELATIONSHIP BETWEEN ORGANIZATIONAL SIZE AND GREEN INITIATIVES, QUALITY MANAGEMENT, AND ORGANIZATIONAL PERFORMANCE

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Stronger initiatives embedded in the green movement can be seen throughout the world across industries. This comes from the awareness of environmental risks and the need to compete through efficiency. In this study, we examine the size of organizations and its connections to organizational green orientation and impact, quality management programs, and employee perceptions of cultural practices and organizational performance. Results indicate large-sized organizations use quality management tools more extensively, and small-sized organizations have a more informal and decentralized organizational culture. Findings also show that larger sized companies have higher levels of company success than smaller sized organizations in that the impact of green practices is perceived as favorable and larger organizations are seen as having overall higher levels of performance than their smaller counterparts.

Introduction

Businesses and consumers today confront the challenge to protect and preserve the earth's resources and our environment. Both corporations and buyers have become aware of not only the deteriorating environment but also the direct impact our behaviors impose on the planet (Laroche, Bergeron, Tomiul & Barbaro-Forleo, 2001). Many industrialized countries enjoy affluent products, food, energy, and so forth, but current governmental, corporate, and private efforts to overcome the negative environmental/energy impact have not been effective enough to remove the worldwide problem (Ahn, 2014). Along with resource and energy deficiency and the rise of eco-friendly products generated by consumer demand, the green movement has rapidly taken center stage in most companies' operations. The awareness of diminishing supply of natural resources is congruent with the belief that ecological balance may be at a critical disruption stage (Hayes, 1990). Preservation issues have forced companies—small and large, domestic and international—in every industry to dig deeper into their strategies, practices, and goals in order to sustain operations and profitability.

Most green movement research focuses on the topics of green manufacturing, sustainability, green marketing, or green consumers. Few, if any, discuss internalized characteristics and mechanisms that can influence the success of green initiatives and the implications on organizational performance. This study examines an organization's green orientation, employee perceptions of companies' commitment to greener practices, total quality management (TQM) programs, as well as the linkage between factors of organizational culture and performance. Specifically, we focus on organizational size in terms of the number of employees and explore the connections between organization size and green movement within companies, which may lead to organizational success.

Literature Review

A chilling research paper 'World Scientists' Warning to Humanity' was published in November 2017 and then again—dubbed 'a second warning'—in December 2018. It cautioned the unwelcome fate of humanity partly as a dire consequence of rapidly diminishing natural resources and damaging natural entrainment. This research quickly received the largest-ever formal support by the science community and garnered more than 20,000 expert endorsements from approximately 200 countries. Not surprisingly, the topic of preserving our planet is not new. Scientists, Businessmen, scholars, and individuals have long been concerned about, if not at least interested, in protecting the planet we live. Notably, there has been increased interest in the green movement in academia. Most studies focus on green manufacturing (Dief, 2011; Ma, Liu, Zhang, & Wu, 2016; Sen, Bohidar, Shrivastava, Sharma, & Modi, 2015; Sezen & Cankaya, 2013), sustainability (Ahn, 2014; Lagas, 2016; Paul, Bhole, & Chaudhari, 2014), green marketing (Maheshwari, 2014; Sujith, 2017; Yeow & Yazdanifard, 2014), and consumer behavior towards green products (Doszhanov & Ahmad, 2015; Sandu, 2014; Yang, 2017).

Green Manufacturing

More companies "go green" because of the realization that they can contribute to the preservation of our environment and increase profits at the same time. Businesses across industries are going green, including technology, petroleum, and various production industries. Greener computing is the practice of efficient and eco-friendly computing resources. Making sure the entire manufacturing process surrounding informational technologies (computers) is "greener" can be beneficial to the economy and society. Cleaner tech products have particularly benefited from a shift in consumer preferences toward a greener environment (Kabirah, Topkar, & Walke, 2010). Other areas going green are the liquefied petroleum industry (Liu, Lyons, & Sukanya, 2014), the fossil fuel production industry (Darapu & Darapu, 2014), and manufacturing industries of which emissions of potential pollutants are byproducts (Ben-Salem, Gharbi, & Hajji, 2016). What most of the companies within these industries have in common is that the utilization of green technologies potentially optimizes resource consumption, reduces waste, and adopts recycling and reuse techniques so that the cost of production can also be optimized. One of the main concerns of these companies is to adapt production processes to complete manufacturing with less impact on the environment, to consume optimum energy for its production, and to produce minimal waste.

The term 'green manufacturing' reflects the new manufacturing standard that employs various 'green'—more eco-efficient—strategies and techniques (Deif, 2011). Green strategies include companies' objectives and principles, while green techniques include technology and innovative methods. These eco-efficient processes consist of creating products and systems that consume less material and energy, substituting input materials (non-toxic for toxic, renewable for non-renewable), reducing unwanted outputs, and converting outputs to inputs (recycling). Green manufacturing pushes innovation and job creation in the workplace. It is a rather diverse field ranging from retail and design to transportation and construction (Timm, 2014).

Deif (2011) suggested that there are three reasons that justify investing and implementing green manufacturing techniques: efficiency, market share, and government support and regulations. Employing greener manufacturing can save time and money because the idea is to make the same product using fewer resources or energy. New consumer demands and heightened consumer awareness (Willson, 2011; Ackerman, 1997) combined with increased global competition pressure manufacturing enterprises to review their strategies in order to secure market shares and sharpen their competitive edges. Pressure from governments to evolve into green manufacturing is also increasing. As regulations change, penalties

and tax benefits increase, becoming greener at different manufacturing stages may become a mandate rather than an option.

The value or methods of investing in green technology and green transformation may not be universally agreed upon, but few disputes the notion that green manufacturing can have a profound positive impact on any business. Hoffman (2000) argued that green attempts in manufacturing should be an environmental strategy rather than a management approach, thus creating a win-win scenario by which manufacturers can improve environmental performance whilst achieving economic gain. Li, et al. (2013) suggested in their information technology and green application research that green practices can help companies increase profits in the long run. Sezen and Cankaya (2013) found that green manufacturing can lead to lower raw material costs, production efficiency gains, and reduced environmental and occupational safety expenses. Further, they found by using a system-wide and integrated approach to the reduction and elimination of waste streams associated with the design, manufacture, and disposal of materials, companies can improve not only their performance but also their corporate image. Lamvik, Low, Myklebust, and Walsh (2001) examined ways to achieve innovative eco-friendly solutions, and Ma, Liu, Zhang, and Wu (2016) examined the relationship between carbon sensitive products, emissions, and profit. Ma et al. found that the multi-goal green manufacturing model increased economic benefit while still reducing emissions.

Green Movement and Sustainability

Recent climate events and reports constantly remind us of the importance of corporate environmental sustainability and responsibility. The definition of sustainability is commonly referred to as the ability to meet the needs of the present generation without compromising the ability of future generations to meet their own needs (World Commission on the Environment and Development, 1987). Since green manufacturing is linked to a firm's ability to sustain environmental, economic, and social objectives in the manufacturing domain, it is not difficult to see why sustainability is seen as a key component of new technologies in the field of green manufacturing (Ahn, 2014).

Environmental sustainability has been defined as a management approach that involves developing strategies that sustain the environment and produce profits for the company (Maheshwari, 2014). It is the creation of products that minimizes the negative environmental impact while conserving natural resources. Hence, sustainability benefits businesses when they switch to greener manufacturing practices. These benefits include sales increase, expanding market share, energy cost savings, government incentives, higher workplace morale and sense of pride, and improved health and safety (Apple Rubber, 2016; Lagas, 2016).

Environmental issues and sustainability have become some of the most vital topics for management, strategic business, manufacturing, and product development decisions, as a result of the hasty reduction of natural resources and concerns over corporate social responsibility (Sezen & Cankaya, 2013). The shift to using materials that are more environmentally friendly has led to the development of lower cost products that ultimately do less damage to the environment (Paul, Bhole, & Chaudhari, 2014). Yet there are misconceptions about "going green," and that is, while going green conveys the sense of ability and responsibility on converting outputs or recycling, sustainability takes it beyond the day-to-day duties to become part of a firm's strategy and identity.

Green growth has risen to the top of many businesses' agendas. Companies like Wal-Mart, GE, and DuPont, among others, have aggressively launched eco-friendly products in a bid to use sustainability as a revenue driver (Unruh & Ettenson, 2010). Green initiatives are also expected to manifest as competitive

advantages. As seen in the example of the Brita water filter, when its share declined, the company recovered its momentum by going green, then educated its customers about the benefits of going green, which also had a positive effect on the company's success.

Green Marketing

The ability to grow and remain profitable is certainly a top priority for all domestic and international businesses. Companies all over the globe are under pressure from stakeholders to be eco-efficient (Klebnikoff, 1996). Cost saving and market opportunity potential come with the practice of green marketing. Green marketing is the holistic approach towards identifying and satisfying the needs and wants of target consumers (Maheshwari, 2014). It is a promotional exercise intended to benefit the company by shaping consumer behavior towards a brand (Sujith, 2017). Practicing green marketing means selling and promoting goods and services that are manufactured through green processes and are presumed to be environmentally safe. Green marketing incorporates a broad range of activities such as research and development, advertising, packaging, and production process, as well as modifications of the aforementioned activities. Green marketing is not limited to adding a green theme to a company's brand. It is the overall efforts to eliminate marketing processes that are detrimental to the environment and the utilization of environmentally safe processes in all aspects of product marketing. It is generally accepted that while firms may have to invest more initially, the investment will pay off in the long run in increased sales and revenue, long-term growth and profitability, and positive corporate identity (Maheshwari, 2014).

Raluca and Cuza (2014) posited three stages to green marketing: finding solutions, cleaner technology, and quality outputs. They specifically differentiated the difference between green products and organic products, which is that 'organic' simply means the absence of chemical substances, while 'green' products take into account environmental health in the design, manufacturing, distribution, and disposal stages. Yeow and Yazdanifard (2014) examined potential problems when failing to implement green marketing. They explained when customers are aware of the production process contributing negatively to the environment; they can refuse to purchase those items. While the obvious advantage of going green is to secure sales, companies likewise win by conserving resources such as electricity. The authors also pointed out another advantage of green marketing is in the form of government assistance (i.e., grants or loans). Toyota and Starbucks are two examples that promote greener products (Prius model and superior coffee beans) at premium prices yet still highly profitable. Both companies emphasize their efforts in minimizing environmental footprints with energy-efficient operations, thus attracting consumers with a greener attitude. This brings us to the topic of green products and green consumers.

Green Consumers

Today's consumers are more conscious about the environment and pay more attention to firms, products, and processes and whether operations are being carried out in a socially responsible manner. The well-being of planet earth has become a critical issue, so much so it is influencing how products are developed, marketed, and disposed of. Most studies have focused on the general environmental behavior instead of consumer behavior specifically (Gan, Wee, Ozanne, & Kao, 2008). Further exploration of consumer attitudes towards green products is necessary. Previous research showed that 84% of consumers expressed concern on issues related to the environment, and some are even changing their buying behaviors because of this concern (Schlossberg, 1990; Fisher, 1990). Consumers today are more interested in protecting our habitat, and they understand production and consumption behavior have direct effects on the environment (Sujith, 2017). Green consumers arose from the preference of green manufacturing and eco-friendly products (Sandu, 2014), and they are defined as someone who voluntarily engages in consumer practices that are regarded as environmentally friendly (Peattie, 2001). Green

consumers typically support eco-friendly attitudes and purchase green products over standard alternatives. Inevitably, businesses that position themselves as sellers of "eco-friendly" or "environmentally friendly" products may enjoy a more competitive advantage among these customers (Sujith, 2017). In Yang's (2017) study, he pointed out brands with an environmental-friendly image will have an enhanced perception of the quality of their products, and consumers are more likely to make eco-friendly purchasing decisions if the products are produced by widely recognized or trusted brands. Doszhanov and Ahmad (2015) studied various methods to increase consumers' intention to use green products. They found green brand awareness, green brand trust (readiness to depend on the capability or reliability of the product), and green perceived value (the assumed worthiness or judgment of the product) have positive effects on the intention of purchasing eco-friendly products.

Increasingly, advertisers focus on environmental benefits when they sell, such as the promotion of energy-efficient light bulbs, biodegradable diapers, and environmentally safe detergents (Laddha & Malviya, 2015). Eco-friendly products have become the better option in many households; they are no longer the expensive or less practical choices. Green products help realize the green manufacturing objectives in practice. Some (Kangovou, 2017) argue that embedding responsible decision-making in consumers not only helps businesses create relationships with them but also benefits families through smarter product choices. Less harsh chemicals, prolonged usage, healthier lifestyles are among the benefits. Consumers are aware of the potentially higher investments in eco-friendly products; however, the use of these products is often more cost efficient in the long-run. Reusable coffee cups and grocery bags are prime examples. For customers who are not interested in preserving the environment, eco-friendly products can still be marketed as products that are more efficient and long-lasting compared to their competitors, in addition to being green.

Total Quality Management (TQM)

In this research, we consider whether there may be linkages between employee commitment to the green movement and that same employee's belief that his organization has implemented TQM programs in a quality way. Our initial interest was in the area of QM maturity and had its origin in a review of literature that has hailed the advent of Quality Management as offering great potential as a solution for recent problems with productivity and quality in US corporations. In turn, declining quality and productivity were offered as key offenders where US firms were losing competitive advantage, especially to Japan (e.g., Bowen & Lawler, 1992; Fuld, 1992; Lawler, Mohrman, & Ledford, 1992; Shearer, 1996). However, we noted other literature which has suggested that QM programs, at least as initially introduced in a number of U.S. organizations, have represented anything but a panacea. Moreover, in at least some cases, efforts to introduce quality programs have met with problems and failures (e.g., Choi & Behling, 1997; Klein, 1991; Parker, 1991). We wondered why such differences in organizations' experiences with quality programs could have occurred. In addition, recent research has shown that an important underlying issue may involve the *depth* or *qualitative aspects* of the organization's experience with QM, a term referred to as QM maturity (Fok, Hartman, Patti, & Razek, 2000). Specifically, Fok, et al. reported that it is important to distinguish between the *length of time* an organization has reported that it has been "on QM," and the quality of its implementation.

In this study, we suggested that QM maturity may be important in understanding the impact upon related systems in organizations differing in QM maturity. In terms of ideas from socio-technical systems theory, for example, we recognize that organizations must be understood as complex and highly interconnected bodies of social and technical systems. Changes to one or more of the systems will cause change throughout the systems comprising the organization (Jacques, 1952; Trist & Bamforth, 1952). From this perspective, it appears likely that, under increasing QM maturity, or as QM is implemented with more

depth (i.e., more comprehensively, in ways that impact more parts of the organization and the like), we should expect effects upon related systems. It was also found that QM maturity impacts individuals' understanding of QM concepts, leads to increased job enrichment, affects employees' assessments of the organization's culture, as well as their assessments of how the organization is performing (Fok, Hartman, Patti, & Razek, 2000). The same study has shown that as organizations increase in QM maturity, their adoption of information systems (IS) will be more user-centered and participative.

Quality Management (QM), Sustainability, and "Green"

Being green positively impacts organizations' competitive edges in many aspects, including research, manufacturing, marketing, and sustainability. Reduction in material wastes and energy consumption may reduce production costs and improve production time. Quality of production processes will likely be improved and thus, posing positive impact on product quality. This will increase the appeal of green products to the growing number of consumers looking for more eco-friendly goods. All of these benefits are important because they contribute to a company's long-term growth. Since long term growth is many organizations' top priority, the green movement undoubtedly plays an important role in company success. Growth in the long-run hinges heavily on the sustainability of the firm and of the market, and sustainability hinges heavily on quality management (QM) practices.

Sustainable development is based on the perceived need to address environmental deterioration and to maintain vital functions for the well-being of all generations. It has been perceived as a new tool in company planning (Beatley & Manning, 1998) and a fundamentally important concept that should influence all policy developments within a firm (Loffler, 1998). Zairi and Liburd (2001) defined sustainability development as the ability of an organization to adapt to change in the business environment in order to deploy best contemporary methods to achieve and further maintain superior performance. Their take on sustainability development implies competitiveness, and an organization's competitiveness is partly dependent on their quality management practices. Total Quality Management (TQM) represents the integrative approach in the pursuit of customer satisfaction (Chin, Pun, & Hua, 2001) and overall success. Facing intense pressure from global competition, organizations realize the need to incorporate sustainable development and TQM in order to reach higher levels of improvement and ultimate profitability (Hitchcock & Willard, 2002; Jonker, 2000; McAdam & Leonard, 2003). The idea of expansion of TQM to include sustainability, and the expansion being fueled by pressure to ensure long-term survival or growth surrounded by the emphasis of globalization is thus born (Dervitsiotis, 2001; Wilkinson, Hill, & Gollan, 2001; Zairi, 2002)

In this study, we theorize employee attitudes toward the green movement may be influenced by their perceptions about TQM programs implemented in the workplace. Previous research examined employee involvement (Rapp & Eklund, 2002), human resource management and leadership (Daily & Huang, 2001), commitment (Matta, Davis, Mayer, & Conlon, 1996), and personality traits (Ahmad & Schroeder, 2002) all express the possible connections between perceptions and attitudes. How employees perceive the effectiveness of varying TQM tools employed in the workplace should have significant consequences on employee attitudes on being green.

Organizational Culture

Organizational culture is part of an organization's identity and "personality." It is a system of shared beliefs and values that develops within an organization that is unique to it which guides the behavior of its members. Corporate culture often is an invaluable tool used to implement company strategies. When green movement inevitably becomes a part of organizational strategy, the culture that binds members of

the organization together also impacts the level of success on green initiatives. As society gets on board with the preservation of our environment, companies risk developing a poor image if they neglect their part in implementing the needed change internally. Companies incorporating these initiatives within part of their corporate culture could become the leaders in the green movement and reach higher levels of sustainability and profitability (Acharya, Vadher, & Acharya 2014).

In this research, we posit that organizational culture may impact employee perceptions of the green movement and its importance to the organization, as well as impacting individual employees personally. In addition, corporate culture may influence employee perceptions of performance outcomes. We theorize that as organizations become greener, organizational culture will become more employee- and customer-centered, and employees may become more empowered. In turn, supportive organizational culture towards the green movement will lead to higher performance, perhaps in part through employees who are more supportive of the green movement.

Organization Size

In early research, Child (1972) highlighted the importance of *strategic choice* by organizational decision makers and its impact on factors including organizational size and market focus. Other research has previously examined whether organizations of different sizes and market focus may differ on several variables related to the green movement and Quality Management in Jamaica and the United States (Zee, Fok, & Hartman, 2011). More research shows that employees who believe that their organizations are aligned with the green movement also see the organization as higher in QM maturity and overall performance (Zee, Fok, & Fok, 2017). Size is highly relevant to organizational strategy and structure, specifically mentioned in the literature of "Differences between Strategic Planning at Small Versus Large Firms" (Boundless, 2016). In other research, the company size will impact its focus points, challenges, and approaches in quality management strategies (Ahire & Golhar, 1996; Roberts, 2013). Studies can be found looking specifically into firm size versus implementation successes of quality management programs. For example, studies by Kober, Subraamanniam, and Watson (2012), Assarlind and Gremyr (2014), as well as Melao and Guia (2015) all reinforced the differences in ability to successfully implement quality management programs between large firms and small firms. Finally, Cho (1994) and Isa, Zaroog, and Raju (2016) investigated the factors affecting the successful implementation of TQM in large vs. small organizations in the United States and Malaysia, respectively. In turn, these choices ultimately impact organizational effectiveness (see especially Beckman, 2006; Kreitner & Kinicki, 2007). In this research, we extend the consideration of the impacts of size (large vs. small) upon the other relationships in our model.

Research Question

In this study, we extend the examination of these issues to consider organizational culture, employee perceptions of organizational commitment to the green movement, and the QM maturity of the organization. Additionally, where there is a higher level of perceived commitment to the green movement and where more mature QM systems are in place, we expect that overall, the organization itself will be seen as "doing better," and the impact of the Green Movement will be perceived as favorable. Finally, we consider what impact organizational size may have upon these relationships. Specifically, small and large organizations will have different levels of organizational green orientation, QM maturity, organizational culture, and report differing impacts of the green movement.

Research Question: *Small and large organizations will have different levels of organizational green orientation, organizational culture, QM maturity, organizational performance, and report differing impacts of the green movement.*

Methodology

Subjects of the Study

Subjects in the sample were approximately 331 full-time employees from a wide variety of industries in the South. The subjects were roughly 51.7 % male and 48% female, with an average age of 41.49. Among these 331 subjects, there are approximately nine categories of industries in our survey instrument. The three largest percentages of the subjects work in retail, health care, and manufacturing industries, with 22.1%, 20.9%, and 12.7%, respectively. The results are shown in Table 1.

Table 1 Types of Industry and Numbers of Employees

		Industry			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Manufacturing	42	12.7	12.7	12.7
	Financial Services	15	4.5	4.5	17.3
	Retail	73	22.1	22.1	39.4
	Utilities	9	2.7	2.7	42.1
	High Technology	7	2.1	2.1	44.2
	Education	18	5.4	5.5	49.7
	Health Care	69	20.8	20.9	70.6
	Government	5	1.5	1.5	72.1
	Other	92	27.8	27.9	100
	Total	330	99.7	100	
Missing	System	1	0.3		
Total		331	100		

		Number of employees			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Over 500	151	45.6	45.8	45.8
	251-500	15	4.5	4.5	50.3
	51-250	45	13.6	13.6	63.9
	Less than 50	119	36	36.1	100
	Total	330	99.7	100	
Missing	System	1	0.3		
Total		331	100		

Approximately 45.8% of the subjects are employed in a company that has more than 500 employees, 4.5% of the subjects work in a company that has 251 to 500 employees, 13.6% of the subjects work in a company that has 51 to 250 employees and 36% of the subjects work in a company which has less than 50 employees. Subjects responded to a survey that asked about their perceptions and experiences about the green movement, quality management, and organizational culture in their own firms. In this study, we will concentrate on the relationships among organizational size in terms of the number of employees in

the company, commitment to the green movement, quality management, organizational performance, and impacts of organizational culture.

Instrument

Organizational Green Orientation

Based on the previous research (Li, Hartman, and Zee, 2009), we measured Organizational Green Movement by using a survey instrument that measures the perceived use of twenty-one organizational green initiatives on a 5-point Likert scale. When factor analyzing these items, we obtained a 5-factor solution, and the total variance explained was 63.07%. Table 2 provides the items and shows the results. The first factor included the green-sensitivity of top management, managers, and employees, and therefore was labeled "Green Stakeholders." The second factor was termed "Green Materials" which included lighter and less harmful materials for green products/processes initiatives. The third factor was named "Green Production" since it contained items related to production processes that reduced energy, material waste, and efficiency. We called the fourth factor "Green Products" because it included the initiatives that made the products more recyclable, easy to remanufacture and disassemble. The fifth factor was named "Safety Concerns" which focused on producing a safe product and providing a safe working environment for employees.

Quality Management (QM) Maturity

In this study, QM Maturity refers, in a qualitative sense, to the *degree* of QM implementation in an organization. We suggest, and previous research has shown (Ahire & Golhar, 1996; Flynn, Schroeder, & Sakakibara, 1994; Fok et al., 2000, 2001; Patti, Hartman, & Fok, 2001; Saraph, Benson, & Schroeder, 1989) that it can be measured by examining the perceived use of QM programs. These ideas assume that if an organization has more completely followed the QM philosophy, QM programs should be used throughout the organization and in various functional areas rather than in isolation. Moreover, if "quality is indeed everyone's job," where QM is more fully in place, employees should be aware of the various TQM tools and techniques in use. If an organization, on the other hand, has very little or no experience with QM, the opposite is expected to occur. In earlier research (Fok et al., 2000, 2001; Patti et al., 2001), we began the process of developing a measure of QM maturity. The instrument we developed dealt with perceived program *use* and asked respondents whether certain programs were in use in the organization, with a range from "not used" to "high usage."

In this study, consistent with our earlier research, the QM maturity instrument was used to gauge QM maturity. We conducted a factor analysis to identify the underlying dimensionality. Two factors emerged from the "Usage" items. The first factor appeared to include all the traditional quality management programs and was termed "Basic Quality Improvement Tools." The second factor was termed "Advanced Quality Improvement Tools," which includes programs like Six Sigma programs and Black Belt training. 67.39% of the variance was explained by these two factors. Table 3 below provides the items and shows the results of our factor analysis.

Table 2 Factor Analysis on Green Initiatives

Total Variance Explained			
Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	5.643	31.349	31.349
2	1.732	9.624	40.974
3	1.448	8.043	49.016
4	1.326	7.366	56.382
5	1.204	6.690	63.073

Pattern Matrix	Component				
	1	2	3	4	5
Level of Produce/provide safe products/services					0.799
Level of Provide safe working environment for employees					0.825
Level of Our products are recyclable				0.632	
Level of Our products are easy to remanufacture				0.849	
Level of Our products are easy to disassemble				0.832	
Level of Use recycled parts/materials in products/services				0.434	
Level of Use lighter components/materials in products/services		0.358			
Level of Use less harmful ingredients in our products/services		0.524			
Level of Eliminate environmental damage from using our products		0.908			
Level of Eliminate environmental damage from our production/services processes		0.899			
Level of Have eco-labels on our products		0.398			
Level of Minimize waste of energy in production and services			0.815		
Level of Minimize waste of material in production and services			0.928		
Level of Increase cost-effectiveness in production and services			0.702		
Level of Top management is green-sensitive	0.851				
Level of Managers are green-sensitive	0.965				
Level of Employees are green-sensitive	0.876				
Level of Being green has been considered as an important quality characteristic	0.787				

Organizational Culture

Based on previous research (Fok et al., 2000, 2001; Harman, Fok, & Zee, 2009), we measure the Organizational Culture by constructing a series of paired opposite items which asked whether the organization's climate should be described as open vs. closed, soft vs. tough, personal vs. impersonal, and the like. Table 4 below provides the items and shows the results of our factor analysis. We obtained a two-factor solution in case of the Organizational Culture items and 44.529% of the variance was explained by these two factors. We have labeled Factor 1 as "Continuous Improvement Culture" which included cultures that were open, team-oriented, personal, participative, and proactive. Factor 2 was named "People Friendly Culture" because it consisted of the soft, informal, and decentralized cultures.

Table 3 Factor Analysis on Quality Programs Usage Items

Total Variance Explained			
Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.275	37.915	37.915
2	1.768	29.475	67.39

Pattern Matrix	Component	
	1	2
Quality management (QM) program	0.643	
Employee suggestion channels	0.724	
Employee quality training programs	0.859	
Quality improvement seminars	0.775	
Six sigma programs		0.905
Black belt training		0.955

Table 4 Factor Analysis on Organizational Culture

Total Variance Explained			
Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.128	26.596	26.596
2	1.435	17.933	44.529

Pattern Matrix	Component	
	1	2
Open	0.775	
Soft		0.672
Informal		0.639
Decentralized		0.622
Team-Oriented	0.647	
Personal	0.386	
Participative	0.666	
Proactive	0.608	

Organizational Performance

The Organizational Performance items were primarily adapted from the Malcolm Baldrige National Quality Award outcome assessment measures. The Baldrige Awards are designed to identify organizations that are performing in an exceptional manner and include criteria for identifying excellence. We used the Baldrige criteria in the form of a scale that asks respondents to provide perceptions about their organizations along Baldrige lines. The resulting scale has been used and reported in previous work (Fok et al., 2000, 2001; Hartman, Fok, & Zee, 2009). The instruments included are items such as "Overall, my company is performing well," "Overall, morale in my company is high," "Overall, my company is productive," and the like. Factor analysis in this study indicated that one factor was present. The results in Table 5 showed that 56.205% of the variance was explained by the factor and we named the factor "Organizational Success."

Table 5 Factor Analysis on Organizational Success

Total Variance Explained			
Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	4.496	56.205	56.205

Component Matrix	
	Component
	1
Overall, my company is performing well	0.753
Overall, morale in my company is high	0.822
Overall, my company is productive	0.788
My overall job satisfaction is high	0.800
In general, my co-workers are happy and proud of working for my company	0.820
In general, my company has good relationships with our customers	0.708
Relative to our competitors, my company's customers are satisfied with our products/services	0.708
Overall, I am satisfied with the progress of green movement in my organization	0.563

Impact of Green Movement

The instruments included are items such as "Provide better products," "Provide better services," "Have better relationship with customers," "Have better relationship with suppliers," "Have better reputation," "Provide better working environment," "Increase profits," "Reduce costs," and "Improve productivity." Factor analysis produced a single-factor solution, and we named it "Impact of Green Movement." 70.987% of the variance was explained by this factor (Table 6).

Table 6 Factor Analysis on Impact of Green Movement

Total Variance Explained			
Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	6.389	70.987	70.987

Component Matrix	
	Component
	1
Provide better products	0.826
Provide better services	0.861
Have better relationship with customers	0.873
Have better relationship with suppliers	0.863
Have better reputation	0.817
Provide better working environment	0.844
Increase profits	0.822
Reduce costs	0.795
Improve productivity	0.878

Organization Size

In this research, we extend the respondents to report the approximate number of employees in their organizations. Those who reported fewer than 50 employees are grouped into the small size group, and those with more than 500 employees are grouped into the large size group, while those with between 50 and 500 employees are dropped from the analysis. There were 118 companies in the small company size group and 151 companies in the large group.

Results

Our research question suggested that small and large organizations would have different levels of organizational green orientation, organizational culture, QM maturity, organizational performance, and impact of the green movement. Table 7 summarizes the MANOVA results indicating the overall significance and the significance for individual factors. Of the factors demonstrating significant group differences due to organization size, Table 8 shows the means for each sub-group. The MANOVA results are significant with a p-value of .000, which implies that small size organizations were significantly different from large size organizations and that respondents reported different levels of organizational green orientation, culture, QM maturity, and impact of the green movement (Table 7). Among the eleven factors, seven factors had significant group differences due to organization size. Of the five organizational green orientation dimensions, the results have shown significant group differences in four – "Green Stakeholders", "Green Production", "Green Products", and "Safety Concerns." Organizations with more than 500 employees reported significantly higher factor scores for "Green Stakeholders", "Green Production", "Green Products", and "Safety Concerns" than did organizations with fewer than 50 employees (Table 8). The results have supported the idea that large size companies have more stakeholders who are committed to being green at all levels, are more devoted to developing a green production process, produce products that are environmentally sustainable, and display more safety concerns to the products and the employee working environment.

We found that both "Use of Basic Quality Improvement Tools" and "Use of Advanced Quality Improvement Tools" are statistically significant with larger size companies displaying greater averages than that of smaller size companies (Table 8). The results imply that large size organizations have higher levels of usage of both traditional TQM tools and advanced TQM tools than small size organizations. "People Friendly Culture" is significant and the average score of small size organizations is greater than that of large size organizations. The results suggest that small size companies are more informal, more decentralized, and more personal than large size companies. "Organizational Success" is significant with the average factor score of large size companies greater than that of small size companies. The results suggest that large size companies have higher levels of organizational performance than small size companies.

Table 7 Summary of MANOVA results - Organizational Size

Multivariate Tests						
Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	0.018	.436 ^b	11.000	257.000	0.939
	Wilks' Lambda	0.982	.436 ^b	11.000	257.000	0.939
	Hotelling's Trace	0.019	.436 ^b	11.000	257.000	0.939
	Roy's Largest Root	0.019	.436 ^b	11.000	257.000	0.939
Emp_size	Pillai's Trace	0.233	7.117 ^b	11.000	257.000	0.000
	Wilks' Lambda	0.767	7.117 ^b	11.000	257.000	0.000
	Hotelling's Trace	0.305	7.117 ^b	11.000	257.000	0.000
	Roy's Largest Root	0.305	7.117 ^b	11.000	257.000	0.000

Tests of Between-Subjects Effects						
Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	Green Stakeholders	9.417	1	9.417	9.478	0.002
	Green Materials	3.068	1	3.068	3.336	0.069
	Green Production	5.661	1	5.661	5.898	0.016
	Green Products	4.797	1	4.797	4.719	0.031
	Safety Concerns	8.322	1	8.322	9.886	0.002
	Continuous Improvement Culture	.462	1	0.462	0.443	0.506
	People Friendly Culture	22.267	1	22.267	23.155	0.000
	Basic Quality Improvement Tools	23.452	1	23.452	24.525	0.000
	Advanced Quality Improvement Tools	13.974	1	13.974	14.099	0.000
	Impact of Green Movement	.319	1	0.319	0.314	0.576
	Organizational Success	14.038	1	14.038	14.160	0.000

Table 8 Summary of the Group Means for Variables with Significant Group Differences due to Organizational Size

		Mean
Green stakeholders	Over 500	0.16
	Less than 50	-0.21
	Total	0.00
Green Production	Over 500	0.11
	Less than 50	-0.18
	Total	-0.01
Green Products	Over 500	0.14
	Less than 50	-0.13
	Total	0.02
Safety Concerns	Over 500	0.20
	Less than 50	-0.15
	Total	0.05
People Friendly Culture	Over 500	-0.22
	Less than 50	0.36
	Total	0.03
Basic Quality Improvement Tools	Over 500	0.22
	Less than 50	-0.38
	Total	-0.04
Advanced Quality Improvement Tools	Over 500	0.24
	Less than 50	-0.22
	Total	0.04
Organizational Success	Over 500	0.17
	Less than 50	-0.29
	Total	-0.03

Discussions and Conclusions

Engaging in activities which increase profit while still being socially responsible is understandably one of the top goals of every company. Though within the multifaceted operations of a business and complexity surrounding the aspects of business decisions, we understand some facets must be prioritized and others must be sacrificed to some extent. Adjustments made can decide the success or failure of certain implementations in a company, and the ability to mobilize resources is affected by the size of the company. Also keeping in mind that not all consumers are willing to pay for greener products which may cost more even though they are efficient in the long run. In the quest of being environmentally responsible, profitability may suffer, and with the effort to please green oriented customers, production value may decline.

How much adjustments to the internal system dictates the success or failure of certain implementations within the company? These adjustments are decided by how much organizational resources a company can garner. To a certain extent, the ability to mobilize resources is affected by the size of the company. In this research, we investigate whether large-sized companies report differing perceptions of the company's impact on the environment compared to small-sized companies. Results showed that participants from larger companies perceive stronger impact. This is not unexpected, as larger organizations typically have more resources to secure more impactful outcomes. Stakeholders -- everyone whose interests are affected by the organization's actions are more likely to have the means to exhibit higher commitment levels to being green. Larger companies show higher levels of commitment, production, product, and safety than smaller companies. That means stakeholders of a larger company demonstrate stronger devotions to a greener production process and reducing energy and waste while increasing efficiency. Products produced by a larger company are more likely to be recyclable than those produced by a smaller company. Working environments within larger sized organizations tend to be safer for employees than compared to working environments within smaller sized organizations.

In addition, larger organizations also have more means to advertise organizational impact and success internally. These advertisements increase awareness, and therefore influence perceptions of success. Smaller sized companies, on a contrast, usually have less ability to devote resources to maximize perceptions of effectiveness from green practices. The lack of internal promotion and devoted resources of the "green impact" may explain the difference in the reported results.

Where organizational size was considered regarding quality management maturity, results indicated that larger organizations report higher usage of traditional TQM tools and advanced TQM tools compared to smaller organizations. This can also be explained by the availability of resources. Implementing TQM tools can be rather costly, and affordability may be a factor for smaller companies. Our findings further suggested that smaller-sized companies tend to have more informal, personable, and decentralized culture. This could be the result of a natural progression of span of control, as when companies grow larger in size, it often leads to more organizational levels. When more organizational levels are created, the distance between human interactions increases, resulting in the perception of a more formal and less personal workspace.

Going green is a movement, and with every movement comes opportunities. When businesses are able to capitalize on the movement and modify aspects of their operations to be greener, they benefit in the forms of increased sales and expanded market shares. Eco-friendly products can also provide consumers with a sense of responsibility and positive impact through purchases (Kangovou, 2017). The pressure to reverse the negative consequences on our environment with our growing industrial ways of life is mounting and we must find ways to reduce our carbon footprint. This study acknowledges the effort and

movement to reduce environmentally harmful processes and the factors which influence the movement. With this understanding, businesses may improve not only their operations and workers' skill sets, but they may also increase the morale and motivation, as well as health and safety benefits of employees.

Regarding the future, we recommend conducting follow-up studies to focus on several key industries, such as manufacturing, healthcare, retail, and finance and banking. A larger sample size would allow the development of industry specific sustainability strategies and best practices. In addition, studies conducted in different locations within the United States or beyond the U.S. borders could enhance the findings and allow us to determine if results can be generalized across different industries, geographical locations, or countries.

References

- Acharya, S. G., Vadher, J. A. and Acharya, G. D. (2014), "A Review on Evaluating Green Manufacturing for Sustainable Development in Foundry Industries," *International Journal of Emerging Technology and Advanced Engineering*, (4), pp. 232-237.
- Ackerman, F. (1997), *Why Do We Recycle? Markets, Values, and Public Policy*, (Washington DC: Island Press)
- Ahire, S. L. and Golhar, D. Y. (1996), "Quality Management in Large versus Small Firms: An Empirical Investigation," *Journal of Small Business Management*, (34), pp. 1-13.
- Ahmad, S. and Schroeder, R. G. (2002), "The Importance of Recruitment and Selection Process for Sustainability of Total Quality Management," *International Journal of Quality & Reliability Management*, (19), pp. 540-550.
- Ahn, S.H. (2014), "An Evaluation of Green Manufacturing Technologies Based on Research Databases," *International Journal of Precision Engineering and Manufacturing Green Technology*, (1), pp. 5-9.
- Apple Rubber (2016), "5 Important Reasons to Embrace Sustainable Manufacturing," *Apple Rubber Blog*, retrieved from <https://www.applerubber.com/blog/5-important-reasons-to-embrace-sustainable-manufacturing>.
- Assarlind M. and Gremyr, I. (2014), "Critical Factors for Quality Management Initiatives in Small- and Medium-Sized Enterprises," *Total Quality Management & Business Excellence*, (25), pp. 397-411.
- Beatley, T. and Manning, K. (1998), *The Ecology of Place: Planning for Environment, Economy and Community*, (Washington DC: Island Press).
- Beckman C. M. (2006), "The Influence of Founding Team Company Affiliations on Firm Behavior," *Academy of Management Journal*, (49), pp. 741-758.
- Ben-Salem, A., Gharbi, A. and Hajji, A. (2016), "Production and Uncertain Green Subcontracting Control for an Unreliable Manufacturing System Facing Emissions," *International Journal of Advanced Manufacturing Technology*, (83), pp. 1787-1799.
- Boundless (2016), "Differences Between Strategic Planning at Small versus Large Firms," Boundless Management Boundless, retrieved from <https://www.boundless.com/management/textbooks/boundless-management-textbook/strategic-management-12/strategic-management-86/differences-between-strategic-planning-at-small-versus-large-firms-418-1407>.
- Bowen, D. E. and Lawler, E. E. (1992), "Total Quality-Oriented Human Resources Management," *Organizational Dynamics*, (20), pp. 29-41.
- Child, J. (1972), "Organization Structure, Environment and Performance: The Role of Strategic Choice," *Sociology: The Journal of the British Sociological Association*, (6), pp. 1-22.
- Chin, K. S., Pun, K. F. and Hua, H. M. (2001), "Consolidation of China's Quality Transformation Efforts: A Review," *International Journal of Quality & Reliability Management*, (18), pp. 836-853.

- Cho, K. (1994), "Impact of Total Quality Management (TQM) on Organizational Performance in the U.S.: An Empirical Investigation of Critical Success Factors," *ETD collection for University of Nebraska – Lincoln*, <http://digitalcommons.unl.edu/dissertations/AAI9425277>.
- Choi, T. Y. and Behling, O. C. (1997), "Top Managers and TQM Success: One More Look After All These Years," *Academy of Management Executive*, (11), pp. 37-48.
- Daily, B. F. and Huang, S. (2001), "Achieving Sustainability Through Attention to Human Resource Factors in Environmental Management," *International Journal of Operations & Production Management*, (21), pp. 1539-1552.
- Darapu, S. S. and Darapu, S. S. K. (2014), "Green Manufacturing Technologies – A Review," *Conference paper, 29th Indian Engineering Congress, Hyderabad, APSC, IE(I) & Ministry of Urban Development, Govt. of India*.
- Deif, A. M. (2011), "A System Model for Green Manufacturing," *Journal of Cleaner Production*, (19), pp. 1553-1559.
- Dervitsiotis, K. (2001), "Emerging Elements of a World View for Sustainable Quality," *Total Quality Management*, (12), pp. 817-824.
- Doszhanov, A. and Ahmad, Z. A. (2015), "Customers' Intention to Use Green Products: The Impact of Green Brand Dimensions and Green Perceived Value," retrieved from <https://www.researchgate.net/publication/281733955>.
- Fisher, A. B. (1990), "What Consumers Want in the 1990s," *Fortune*, (121), pp. 108-112.
- Flynn, B. B., Schroeder, R. G. and Sakakibara, S. (1994), "A Framework for Quality Management Research and an Associated Measurement Instrument," *Journal of Operations Management*, (11), pp. 339-366.
- Fok, L. Y., Fok, W. M. and Hartman, S. J. (2001), "Exploring the Relationship Between Total Quality Management and Information Systems Development," *Information & Management*, (38), pp. 355-371.
- Fok, L. Y., Hartman, S. J., Patti, A. L. and Razek, J. R. (2000), "The Relationship Between Equity Sensitivity, Growth Need Strength, Organizational Citizenship Behavior, and Perceived Outcomes in the Quality Environment: A Study of Accounting Professionals," *Journal of Social Behavior and Personality*, (15), pp. 99-120.
- Fuld, L. M. (1992), "Achieving Total Quality Through Intelligence," *Long Range Planning*, (25), pp. 109-116.
- Gan, C., Wee, H. Y., Ozanne, L. and Kao, T. (2008), "Consumers' Purchasing Behavior Towards Green Products in New Zealand," *Innovative Marketing*, (4), pp. 93-102.
- Hartman, S. J., Fok, L. Y. and Zee, S. M. (2009), "Linkage Among Employee Perceptions of Organizational Commitment to the Green Movement and Organizational Culture, and Their Perceived Impacts Upon Outcomes," *Journal of Organizational Culture, Communications and Conflict*, (13), pp. 27-44.
- Hayes, D. (1990), "The Green Decade," *The Amicus Journal*, (12), pp. 24-29.
- Hitchcock, D. and Willard, M. (2002), "Sustainability: Enlarging Quality's Mission," *Quality Progress*, (35), pp. 43-47.
- Hoffman, A. (2000), *Competitive environmental strategy*, (Washington DC: Island Press).
- Isa, M. R., Zaroog, O. S. and Raju, S. (2016), "Survey on Total Quality Management in Small and Medium Manufacturing Industries in Shah Alam," *International Journal of Science and Research*, (5), pp. 848-853.
- Jacques, E. (1952), *The changing culture of a factory*, (New York: Dryden Press).
- Jonker, J. (2000), "Organizations as Responsible Contributors to Society: Linking Quality, Sustainability

- and Accountability," *Total Quality Management*, (11), pp. 741-746.
- Kabirah, S., Topkar, V. and Walke, R. C. (2010), "Going Green: A Holistic Approach to Transform Business," *International Journal of Managing Information Technology*, (2), pp. 22-31.
- Kangovou (2017), "The Importance of Eco-Friendly Products," retrieved from <https://www.kangovou.com/the-importance-of-eco-friendly-products>.
- Klebnikoff, S. D. (1996), "Eco-Efficient Leadership; the Road to New Business Opportunities," *Proceeding of the APO World Conference on Green Productivity*, Manila, pp. 491-502.
- Klein, J. A. (1991), "A Reexamination of Autonomy in Light of New Manufacturing Practices," *Human Relations*, (44), pp. 21-38.
- Kober, R., Subraamanniam, T. and Watson, J. (2012), "The Impact of Total Quality Management Adoption on Small and Medium Enterprises' Financial Performance," *Accounting & Finance*, (52), pp. 421-438.
- Kreitner, R. and Kinicki, A. (2007), *Organizational Behavior*, (Boston: McGraw-Hill).
- Laroche, M., Bergeron, J., Tomiul, M. and Barbaro-Forleo G. (2001), "Targeting Consumers Who Are Willing to Pay More for Environmentally Friendly Products," *Journal of Consumer Marketing*, (18), pp. 503-520.
- Laddha, S. and Malviya, M. (2015), "Green Marketing and Its Impact on Consumer Buying Behavior," *NBR E-Journal*, (1), pp. 1-7.
- Lagas, B. (2016), "Five Benefits of Sustainability and Green Manufacturing," *Quality Digest*, retrieved from <https://www.qualitydigest.com/inside/customer-care-column/five-benefits-sustainability-and-green-manufacturing-101816.html>
- Lamvik, T., Low, M. K., Myklebust, O. and Walsh, K. (2001), "Manufacturing a Green Service: Engaging the TRIZ Model of Innovation," *IEEE Transactions on Electronics Packaging Manufacturing*, (24).
- Lawler, E. E., Mohrman, S. A. and Ledford, G. E. (1992), *Employee Involvement and Total Quality Management*, (San Francisco: Josey-Bass).
- Li, J., Hartman, S. J. and Zee, S. M. L. (2009), "A Study of Green Movement Perceptions and Behavioral Intentions," *International Journal of Sustainable Economy*, (1), pp. 133-143.
- Li, J., Morrison, J., Zhang, M. T., Nakano, M., Biller, S. and Lennartson, B. (2013), "Automation in green manufacturing," *IEEE Transactions on Automation Science and Engineering*, (10), pp. 1-4.
- Liu, T. I., Lyons, C. S. and Sukanya, S. (2014), "Intelligent Measurement for Monitoring and Control for Glass Production Furnace for Green and Efficient Manufacturing," *International Journal of Advanced Manufacturing Technology*, (75), pp. 339-349.
- Löffler, P. (1998), "Sustainable Development in Europe," *A Cause for Regional Environment*, (8), pp. 113-120.
- Ma, C., Liu, X., Zhang, H. and Wu, Y. (2016), "A Green Production Strategies for Carbon Sensitive Products with a Carbon Cap Policy," *Advances in Production Engineering and Management*, (11), pp.216-226.
- Maheshwari, S. P. (2014), "Awareness of Green Marketing and Its Influence on Buying Behavior of Consumers: Special Reference to Madhya Pradesh, India," *AIMA Journal of Management & Research*, (8), pp. 497-505.
- Matta, K., Davis, J., Mayer, R. and Conlon, E. (1996), "Research Questions on the Implementation of Total Quality Management," *Total Quality Management*, (7), pp. 39-49.
- McAdam, R. and Leonard, D. (2003), "Corporate Social Responsibility in a Total Quality Management Context: Opportunities for Sustainable Growth," *Corporate Governance*, (3), pp. 36-45.
- Melao, N. F. and Guia S. M. (2015), "Exploring the Impacts of ISO 9001 on Small- and Medium-Sized Social Service Institutions: A Multiple Case Study," *Total Quality Management & Business Excellence*, (26), pp. 312-326.

- Parker, M. (1991), "Participation or Control?" *Academe*, (77), pp. 44-48.
- Patti, A. L., Hartman, S. J. and Fok, L. Y. (2001), "Investigating Organizational Quality Management Maturity: An Investment Validation Study," *International Journal of Quality & Reliability Management*, (18), pp. 882-899.
- Paul, I. D., Bhole, G. P. and Chaudhari, J. R. (2014), "A Review on Green Manufacturing: Its Importance, Methodology and Its Application," *Procedia Materials Science*, (6), pp. 1644-1649.
- Peattie, K. (2001), "Towards Sustainability: The Third Age of Green Marketing," *The Marketing Review*, (2), pp. 129-146.
- Raluca, M. and Cuza, A. (2014), "Green: Marketing, Products, and Consumers," *Practical Application of Science*, (2), pp. 555-562.
- Rapp, C. and Eklund, J. (2002), "Sustainable Development of Improvement Activities -The Long-Term Operation of a Suggestion Scheme in a Swedish Company," *Total Quality Management*, (13), pp. 945-969.
- Roberts, M. (2013), "Large versus Small Business Quality Management Strategies," <http://blog.insresearch.com/bid/179410/large-versus-small-business-quality-management-strategies-data>.
- Sandu, R. (2014), "Green: Marketing, products, and consumers," *SEA-Practical Application of Science*, (2), pp. 555-562.
- Saraph, J. V., Benson, G. P. and Schroeder, R. G. (1989), "An instrument for Measuring the Critical Factors of Quality Management," *Decision Sciences*, (20), pp. 810-829.
- Schlossberg, H. (1990), "Environmental Concerns Lead Some Consumers to Change Buying Habits," *Marketing News*, (24), p. 7.
- Sen, P. K., Bohidar, S. K., Shrivastava, Y., Sharma, C. and Modi, V. (2015), "Study on Innovation, Research and Recent Development in Technology for Green Manufacturing," *International Journal of Mechanical Engineering and Robotics Research*, (4), pp. 185-194.
- Sezen, B. and Cankaya, S. Y. (2013), "Effects of Green Manufacturing and Eco-Innovation on Sustainability Performance," *Procedia – Social and behavioral Sciences*, (99), pp. 154-163.
- Shearer, C. (1996), "TQM Requires the Harnessing of Fear", *Quality Progress*, (29), pp. 97-101.
- Sujith, T.S. (2017), "Awareness of Green Marketing and Its Influence on Buying Behavior of Consumers in Kerala," *International Journal of Scientific Research and Management*, (5), pp. 6156-6164.
- Timm, J.C. (2014), "Millennials: We Care More About the Environment," MSNBC, retrieved from <http://www.msnbc.com/morning-joe/millennials-environment-climate-change>.
- Trist, E. L. and Bamforth, K. W. (1952), "Some Social and Psychological Consequences of the Longwall Method of Coal Mining," *Human Relations*, (4), pp. 3-38.
- Unruh, G. and Ettenson, R. (2010), "Growing Green," *Harvard Business Review*, June 2010 Issue, pp. 1-13.
- Wilkinson, A., Hill, M. and Gollan, P. (2001), "The Sustainability Debate," *International Journal of Operations & Production Management*, (21), pp. 1492-1502.
- Willson, T. (2011), "Dollars and Sense of Green," *The Canadian Manufacturing Online Magazine*, World Commission on Environment and Development (WCED), 1987 Report: 'Our Common Future'.
- Yang, Y. C. (2017), "Consumer Behavior Towards Green Products," *Journal of Economics, Business and Management*, (5), pp. 160-167.
- Yeow, K. Y. and Yazdanifard, R. (2014), "The Concept of Green Marketing and Green Product Development on Consumer Buying Approach," *Global Journal of Commerce & Management Perspective*, (3), pp. 33-38.

- Zairi, M. (2002), "Beyond TQM Implementation: The New Paradigm of TQM Sustainability," *Total Quality Management*, (13), pp. 1161-1172.
- Zairi, M. and Liburd, I. M. (2001), "TQM Sustainability – A Roadmap for Creating Competitive Advantage," *Integrated Management, Proceeding of the 6th International Conference on ISO 9000 and TQM*, Paisley, Ayr, Scotland, 17-19 April, pp. 452-461.
- Zee, S. M., Fok, M. and Fok, L. Y. (2017), "A Study of the Impact of Organizational Commitment to Green Movement and Quality Management," *Global Education Journal*, (2017).
- Zee, S. M., Fok, L. Y. and Hartman, S. J. (2011), "Exploring the Relationships Between Organizational Size and Market Focus and Commitment to the Green Movement and Impacts of Organizational Culture: A Comparative Study of Jamaica and the United States," *International Journal of Business and Social Science*, (2), pp. 19-34.

THE PROLIFERATION OF HARD SELTZER IN THE UNITED STATES BEVERAGE INDUSTRY

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Abstract: This paper investigates the emergence of hard seltzer, a new alcoholic beverage that has gained a cult-like following since 2019. Hard seltzer's perception as a health-conscious, gender-neutral product has accelerated its proliferation and led to the creation of a new organizational form, serving as a specialist in a mature industry. The United States beverage industry has undergone extensive ecological changes as a result of hard seltzer's birth, which the current literature does not robustly address. We examine this phenomenon through the lens of a population ecology approach to organizations.

Introduction

Fueled by evolving consumer tastes and preferences, the United States beverage industry has undergone a drastic transformation due to the emergence of hard seltzer, an increasingly popular carbonated alcoholic beverage generally produced by fermenting sugar (Bernstein, 2019). What was once an unknown product has now become a fixture on store shelves and represents an industry valued at more than \$1 billion (Schultz, 2019). Consequently, competing organizations have taken notice of this widespread popularity, attempting to penetrate the market with similar products of their own (Arthur, 2020). Such jockeying for market share between early adopters and secondary entrants has culminated in "seltzer wars."

The increasing popularity of hard seltzer has caused widespread disruption among competing firms to a degree that has not been seen since the rise of light beer and craft beer. Hard seltzer's proliferation, buoyed by current market trends, has led to the formation of a new niche within the overall beverage sector. As such, hard seltzer firms serve as a new entrant in a mature industry, playing an important role in the industry's continued growth and revitalization (Abernathy, Clark, and Kantrow, 1983).

The goal of this paper is to test organizational ecology theory on the United States beverage industry. Specifically, we investigate how changes in market dynamics have contributed to the birth of hard seltzer as a specialist organization. While many studies have applied principles of organizational ecology to industries that have experienced similar developments as hard seltzer, such as beer (Carroll and Swaminathan, 2000), wine (Simons and Roberts, 2008), banking (Lomi, 1995), and healthcare (Abdool, Eisner, and Stroud, 2019), current literature has not robustly examined this emerging sector. Understanding the hard seltzer phenomenon is important from an industry-wide perspective: the continued growth of these specialist firms will erode generalist organizations' market shares and accelerate their mortality.

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The remainder of this paper is structured as follows: In the first section, we provide an overview of the literature on organizational ecology. In the second section, our hypotheses and our strengths-weaknesses-opportunities-threats (SWOT) analysis are presented. Lastly, we conclude the paper in the final section.

Literature Review

Organizational ecology is a theoretical framework that examines how external factors affect the evolution of organizations. Its key premise is to better understand the founding (birth), growth, and mortality (death) of firms. "It considers both the structural influence of organizational environments and the specific actor characteristics that mediate that influence" (Abbott, Green, and Keohane, 2016, p. 249). At its core, "the emphasis is on the evolutionary dynamics of processes influencing organizational diversity" (Singh and Lumsden, 1990, p. 162).

Under the organizational ecology framework, hard seltzer is a specialist organization within a mature industry; its success is dependent upon firms' exploitation of the environment in order to fill niches. Although modern applications of niche theory have primarily been related to population ecology, the seminal paper that introduced the niche concept can be traced back to Hutchinson (1957), who argued that "the niche of a species is the set of environmental states in which it thrives" (Popielarz and Neal, 2007, p. 68). Under this approach, the application of Hutchinson's theory to population ecology reveals that a niche is a space of N-dimensional resources in which a population of organizations can exist.

In the case of hard seltzer, changing consumer tastes have paved the way for the formation of new niches. "The concept of niche has proven extremely valuable for organizational analysis as a way of specifying competitive processes and environmental dependencies" (Hannan, Carroll, and Polos, 2003, p. 309). A niche's width is determined by the "range of the environmental dimensions across which a population exists" (Carroll, 1985, p. 1266). Generalists such as beer and wine occupy broad niches, while specialist organizations such as hard seltzer occupy narrow and more focused niches (Negro, Visentin, and Swaminathan, 2014). Collectively, these similar organizations form a population (Swaminathan and Delacroix, 1991).

There are three different levels for conducting analyses in organizational ecology: individual, population, and community (Hannan and Freeman, 1977). Careful attention should be paid to the organizational population, as it provides the most accurate level for assessing the founding rate of organizations (Hannan and Freeman, 1987). Within a population, established firms that are slow to adapt to environmental changes are subsequently replaced vis-à-vis new organizational founding. New organizations serve an important role in the population; they are well-equipped to recognize and respond to external environmental factors (Hannan and Freeman, 1989). This is especially true in the case of hard seltzer, as new firms have clearly identified changes in outside forces and have responded by entering the industry with an innovative product.

The resource partitioning model developed by Carroll (1985) can shed light on the growth of specialist organizations within a mature industry. Generalists and specialists occupy different resource spaces; thus, generalists typically focus on the center of the market, leaving opportunities for specialists to target the margins (Swaminathan, 2001). The generic products and services offered by generalists are sometimes detrimental to the organizations' well-being, as it is difficult to attract a loyal following for products that may not appeal to all consumers (Reimer et al., 2016). "For this reason, organizations with

narrow niches tend to have better fitness, provided the environment is fairly stable, and the target audience is of sufficient size” (Reimer et al., 2016, p. 500).

Such a theoretical framework provides an accurate description of the current United States beverage industry, as generalists, such as beer producers, offer their products to the mass market. In contrast, the birth and subsequent growth of hard seltzer can be attributed to its successful positioning as a non-mass market, health-conscious alternative to run-of-the-mill beer. Thus, the ascent of hard seltzer against the backdrop of generalist firms in the beverage industry is consistent with the notion that specialist and generalist organizations are able to coexist without negatively impacting one another (Boone, Carroll, and Van Witteloostuijn, 2002).

Density dependence can explain recent changes to the ecological landscape of the hard seltzer industry. Organizational founding occurs in sparse numbers at first, grows exponentially, reaches a plateau, and eventually declines (Singh and Lumsden, 1990). Hard seltzer has blossomed within a relatively short period of time; annual sales surpassed \$1 billion in 2019 (Schultz, 2019). While three organizations—White Claw, Truly, and Bon & Viv—dominate the industry, hard seltzer’s success has increasingly incentivized new competitors to enter the market.

Hard seltzer is currently experiencing a period of exponential growth, and the continued birth of new hard seltzer firms lends credence to the viability of the industry. Therefore, additional firms will follow suit, which will contribute to an increase in the founding rate of new organizations (Budros, 1994). For example, Constellation Brands, the manufacturer of popular beer brands such as Corona and Modelo, has allocated over \$40 million towards a marketing campaign designed to launch Corona hard seltzer—the largest marketing investment in a single product the organization has ever made (Elejalde-Ruiz, 2020).

Hypotheses and SWOT Analysis

Hypotheses

Hard seltzer’s birth can be traced back to 2012, when Dave Holmes and Nick Shields founded the first organization out of a garage in Connecticut (Nedelka, 2017). Adoption by consumers was initially slow; in 2016, there were only three organizations that produced hard seltzer (Torrey, 2020). Early entrants’ marketing targeted a younger demographic than traditional beer and wine products.

Serving as an alternative to beer, hard seltzer conveys the benefit of a convenient and ready-to-consume product while enjoying the advantage of being regulated as beer. It can be sold alongside beer even in establishments that are unable to sell spirits due to legal restrictions (Palus, 2019). Moreover, hard seltzer’s low carbohydrate, low sugar, and gluten-free characteristics have been shown to be especially appealing product traits for health-conscious consumers (Dukoff, 2020). Thus, we postulate the following hypothesis:

H1: Hard seltzer’s appeal to health-conscious consumers will accelerate its proliferation.

Millennials spend more time doing sports, exercise, and other recreational activities and less time watching television than those age 37 and older (Freeman, 2019). Indeed, millennials are often associated with having a more active and healthier lifestyle than earlier generations, and this influences

their food and beverage choices. Since beer is often viewed as an unhealthy product, it is no surprise that millennials have eschewed it in favor of other alcoholic beverages (Taylor, 2019). These changing dynamics in the United States beverage industry are striking, as domestic beer sales declined by 4.6% between October 2018 and October 2019 (Valinsky, 2019). Unsurprisingly, millennials have gravitated to hard seltzer as a health-conscious alternative to beer.

While many different factors have contributed to hard seltzer's success, the ability of organizations to avoid gender-specific marketing has resonated with consumers; hard seltzer sales increased by over 200% in 2019 (Hobson and Hagan, 2019). As society largely embraces gender inclusion, firms run the risk of alienating potential clientele by structuring their marketing towards an individual's gender. Consequently, we posit the following hypothesis:

H2: Gender-neutral marketing positions hard seltzer as an inclusive product, especially for millennial consumers.

White Claw, the largest hard seltzer organization, prominently features both male and female subjects in their advertisements and thus refrains from perpetuating gender stereotypes commonly encountered in the marketing of alcoholic beverages. The adoption of gender-inclusive marketing by White Claw stands in stark contrast to the beer industry, which has largely targeted male consumers and stereotyped beer consumption as masculine. "The effectiveness of gendered marketing is changing as modern consumers—particularly those of younger generations—are seeking brand experiences that are inclusive toward people of all gender identities and [do not] judge their preferences based on stereotypes" (Powers, 2019, p. 4).

Past endorsements of gendered marketing should serve as a cautionary tale for hard seltzer organizations. In 1993, the Coors Brewing Company launched Zima, a clear, carbonated alternative to beer. During this time, manufacturers were eager to create products to tap new consumers, particularly those who did not like beer. While wine coolers served as a beer substitute, these products were quickly eschewed by most male consumers as effete. As such, Zima was conceived to win over non-beer-drinking males. After a small test market release, Zima was catapulted onto the national level in 1994, backed by a \$38 million marketing campaign (Koerner, 2008). Despite selling over 1.3 billion barrels of product in 1994, Zima never again reached this level of success; sales dropped to 403,000 barrels in 1996 (Koerner, 2008).

Zima's gender-based marketing strategy would ultimately lead to its mortality; the product became a punch-line of jokes typically questioning the masculinity of male consumers. Consequently, the intended target market of Zima—younger male drinkers looking for a beer alternative—was avoiding the product that was supposed to appeal to them. Rather, Zima actually became more popular with a completely different demographic: young female drinkers. By 2008, the product was discontinued in the United States market with the exception of a limited release in 2017 (Koerner, 2008).

Focused SWOT Analysis

To construct a well-reasoned SWOT analysis, we adopt the focused SWOT model proposed by Coman and Ronen (2009). Under this framework, strengths and weaknesses are analyzed following a three-step process. Initially, an event-factor review is conducted to delineate a list of strengths and weaknesses for a particular organization. Second, a core-competence tree is constructed to reduce the number of strengths an organization possesses down to its key competencies. Finally, a focused current-reality tree is utilized to trim down an organization's weaknesses into a refined list (Coman and Ronen, 2009).

Event-Factor Review

An event-factor review is a process in which a firm's strengths and weaknesses are determined by analyzing events that have impacted the organization. The outcomes of each event are divided into two categories—successes and failures—depending on their impact on the organization's value. Once a particular event is identified, a subsequent strength or weakness is associated with it. The event-factor review for hard seltzer is listed in Table 1.

As seen in Table 1, Column 2, a pivotal event for the hard seltzer industry can be traced back to the design of its packaging. The narrow and taller shape of the aluminum can represents a clear line of demarcation between generic beer and craft beer, and stands in stark contrast to other flavored beverages that use glass bottles similar to those used by beer producers. In addition, the minimalist aesthetic of the aluminum can design connotes a unique and differentiated product for consumers.

The development of hard seltzer's inclusive marketing plan is identified as a successful event in Column 2. Hard seltzer's gender-neutral promotion represents a break from established gender stereotypes that have been commonplace in the alcoholic beverage industry. Organizations' openness to inclusion has been cited as a factor in hard seltzer's success and in its broad appeal among consumers. Column 4 lists three hard seltzer weaknesses, with the unified theme being organizations' heavy reliance on a young consumer base. For example, only 25% of baby boomers are even aware of White Claw (Bruce, 2020). Increasing product awareness among older generations is an important path to sustained future industry-wide success. Another weakness identified in Column 4 pertains to hard seltzer's distribution. Specifically, hard seltzer is primarily sold in grocery stores or convenience stores, and it is rarely available in restaurant and bar settings. This gap in distribution represents a short-term deficiency for organizations and a potential opportunity for growth.

Table 1: Event-Factor Review

Event		Factor	
Outcome	Description	Strengths	Weaknesses
Success	Selection of packaging design	Ease of Consumption: Portable product. Appearance: Clean and minimal aesthetic.	
Success	Ingredient selection	Health-conscious appeal: Low-calorie, low-carbohydrate, gluten-free.	
Success	Exceeding sales expectations	Solid financials: \$1 billion industry.	
Success	Regulatory classification as beer	Convenient distribution: Sold alongside beer products. Tax advantages: Taxed as beer, which has a lower rate compared to that of wine and spirits.	
Failure	Target market selection		Limited demographic: Overreliance on younger consumers. Lack of recognition: Product not widely known among older consumers
Failure	Distribution strategy developed		Limited channels: Products not widely served in restaurants or bars

Core Competences and Core Problems

The event-factor review for hard seltzer has identified seven strengths and three weaknesses. The strengths are derived from a few core competencies, while the weaknesses are attributed to a small number of core problems within organizations (Coman and Ronen, 2009). Figure 1 displays hard seltzer's core competence tree. Specifically, three attributes are defined as core competencies: hard seltzer is an inclusive product, it has health-conscious appeal, and it is supported by a favorable regulatory climate. Hard seltzer's leading strength is that it has grown into a \$1 billion industry. Using cause and effect logic, we connect the tree branches and demonstrate the link between hard seltzer's core competencies and its leading strength. In Figure 2, hard seltzer's leading weakness is identified as its limited market share within the beverage industry compared to well-established products such as beer, wine, and spirits. In addition, the focused current-reality tree in Figure 2 specifies three core weaknesses for hard seltzer: limited product distribution, limited product awareness, and oversaturation of choice.

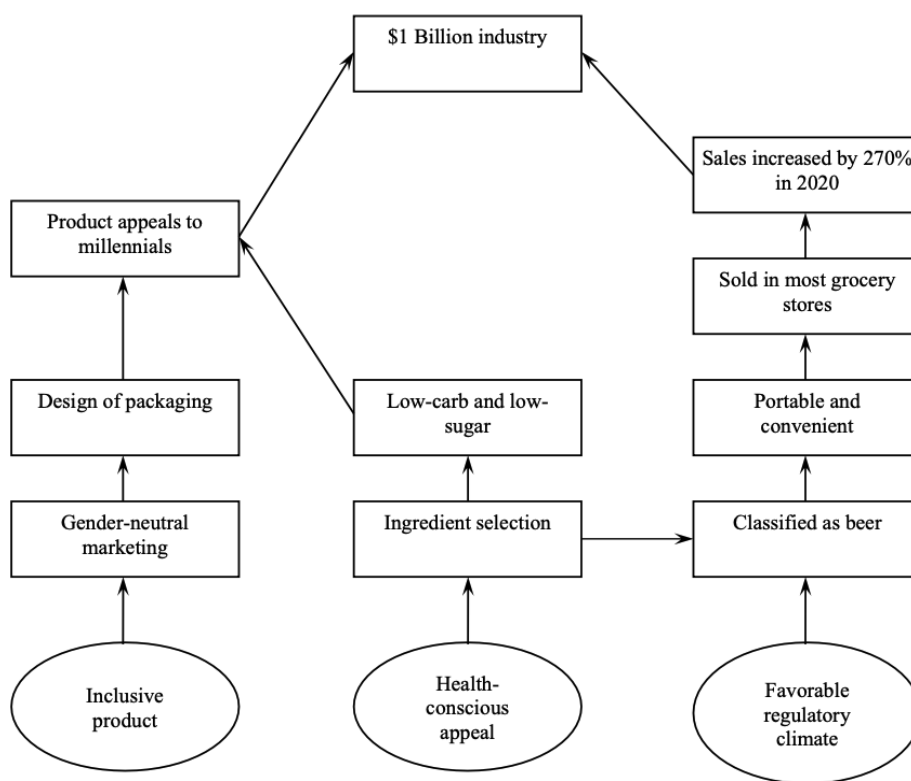


Figure 1: Core Competences Tree

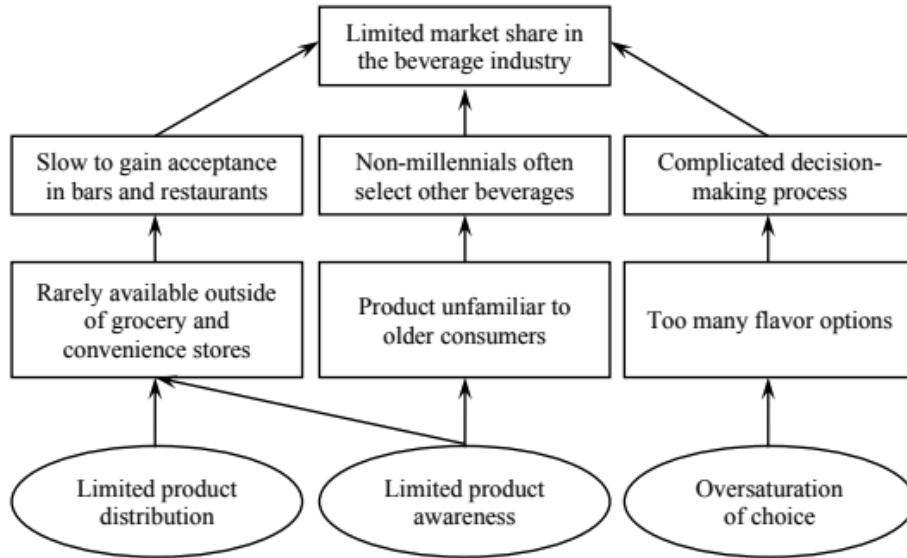


Figure 2: Focused Current-Reality Tree

Opportunities

A traditional SWOT model is utilized to assess hard seltzer’s potential opportunities for growth and to explore the possible threats faced by organizations. In Table 2, two opportunities are identified: corporate social responsibility (CSR) and market expansion. In addition, Table 2 delineates two threats: regulatory vulnerability and choice overload.

Table 2: Opportunities and Threats

Opportunities	Threats
<p>CSR: Creation and implementation of a well-defined and comprehensive corporate social responsibility program.</p> <p>Expanded Markets: Offer a variation of products suitable for in-person consumption at bars and restaurants.</p>	<p>Regulatory: Changes in tax policy and regulations affecting where and how the product can be sold.</p> <p>Choice Overload: The availability of too many flavors could confuse consumers.</p>

Corporate social responsibility (CSR) is “a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis” (Commission of the European Communities, 2001, p. 6). Under this construct, CSR is perceived as a response to stakeholders’ concerns and can serve to enhance organizations’ legitimacy (Vieira, Grantham, and Sampson, 2021). However, the premise of CSR is generally at odds with the traditional viewpoint of organizations: that decisions should primarily focus on profitability. Dodd (1932) called into question the goals and expectations of organizations, contending that firms should incorporate increased social responsibility while looking beyond their stakeholders to a broader audience.

Awareness of CSR has increased over the last decade to the point where it influences individuals' decision-making processes. In 2016, a study conducted by Cone Communications determined that 75% of millennials would accept lower wages in order to work for an organization that embraces tenets of CSR (Taylor, 2019). The impact of CSR extends beyond workers' attitudes toward their place of employment; it also shapes consumers' preferences for certain products and brands. The mere existence of a CSR policy on the part of organizations is not in itself sufficient to draw consumers. Meanwhile, when consumers have a negative view of a firm's CSR campaign, this can adversely affect consumers' perception of the firm's products (Sen and Bhattacharya, 2001). Consumers now expect authentic, targeted efforts that promote societal well-being. "As CSR continues to evolve, [we are] seeing consumers demand more action, authenticity, transparency, and measurable impact" (Moore, 2020, p. 5).

Millennial consumers, a core demographic for hard seltzer, are particularly concerned with sustainability, ethical consumerism, and environmental causes (Allen and Spialek, 2018; Bucic, Harris, and Arli, 2012). These overarching priorities strongly influence millennials' purchases. Given the benefits conveyed by CSR, hard seltzer organizations should establish and incorporate these principles. Clearly, establishing a well-defined CSR plan is a key opportunity for hard seltzer organizations to pursue.

Unlike beer, wine, and spirits, which are frequently served in bars or restaurants, hard seltzer's availability at these establishments is limited. Generally, restaurants seek to earn approximately 30% of their revenue from alcohol sales, making this channel a promising opportunity for organizations (Tempesta, 2020). It is possible that expanding into bars and restaurants will require variations in packaging, similar to how beer is popularly served on draught in these establishments. Truly Hard Seltzer has made such adjustments, offering a draught option to target a broader distribution network (Kendall, 2019).

Threats

Changes in regulatory policy represent the most prominent threat to the continued success of hard seltzer. Currently, 47 states allow the sale of beer in grocery stores, while only 40 allow grocery stores to sell wine (McIntyre, 2020). The regulatory climate surrounding hard seltzer is vague and often misunderstood; consumers frequently mistake its ingredients to include hard liquor, which is dissimilar to hard seltzer's composition.

Interestingly, hard seltzer has an alcohol content that is far lower than that of spirits, and it is produced from brewed malt or brewed sugar (Blankenship, 2020). Both these variations are taxed as beer under Alcohol and Tobacco Tax and Trade Bureau (TTB) regulations (Knizner, 2018). This tax advantage is particularly striking, as beer is taxed at a much lower rate compared to wine and spirits in the United States. Moreover, hard seltzer is generally sold among beer products, even in locations that prohibit the sale of wine and spirits. Clearly, current regulatory policies benefit hard seltzer organizations from a tax and distribution standpoint. Deviations from current taxation policies aimed at reclassifying hard seltzer as non-beer would negatively impact the industry, as would the implementation of any regulations that serve to restrict or impede the sale of hard seltzer.

In January 2020, Truly released a product line of hard seltzer lemonade, while in March 2020, White Claw unveiled three new flavors of hard seltzer (Kubota, 2020; Dammrich, 2020). These variations in flavors joined an established coterie of comparable products within each respective firm. Despite substantial growth in the hard seltzer industry, organizations should exercise caution when releasing new variations of similar products, as an overabundance of choice can have unintended and problematic consequences for the industry.

From potato chips to bottled water, organizations continue to expand the depth of their product lines to elicit consumer purchases by offering slightly differentiated yet similar enough goods. While organizations may believe that it is beneficial to offer a wide selection of products to consumers, this strategy has been called into question. In the hard seltzer industry, there is a delicate balance between offering a variety of products and oversaturating consumers with too many choices. A surfeit of options may leave consumers anxious or overwhelmed, even feeling out of control (Schwartz, 2004). Choice overload occurs when individuals are faced with too many like options, making the decision-making process too complex.

The theory of choice overload was highlighted in an experiment by Iyengar and Lepper (2000) in which consumers experienced one of two random encounters at a grocery store: a display booth was erected for the purpose of advertising jam, and either 6 or 24 flavors of jam were on display. While more consumers stopped to investigate the larger display of 24 flavors, more consumers actually purchased jam from the smaller display. “The apparent contradiction between the initial attractiveness of large assortments and its demotivating consequences is also referred to as the paradox of choice” (Scheibehenne, Greifeneder, and Todd, 2010, p. 410).

Implications and Conclusion

This paper has outlined the emergence of hard seltzer firms using an organizational ecology framework. We hypothesize that hard seltzer’s health-consciousness and gender-neutral marketing position have helped to catapult its early success, especially with millennial consumers. Indeed, recent market trends support our contentions, as millennials now consume “more hard seltzer than craft beer” (Gentson, 2020, p. 2). Furthermore, millennials are more likely to shy away from staid gender stereotypes and turn towards more inclusive products such as hard seltzer (Landsverk, 2021).

While hard seltzer organizations appear to be on an upward trajectory, our focused SWOT analysis identified several weaknesses as potential areas of concern. Specifically, hard seltzer is over-reliant on younger consumers and lacks brand recognition among older clientele. Moreover, limited product distribution could inhibit future growth. Although these factors have not yet played a significant role in the development of the hard seltzer industry, they should nevertheless be carefully monitored.

One potential threat to the success of hard seltzer identified in Table 2 of the focused SWOT model pertains to regulatory vulnerability. Hard seltzer is presently taxed as a beer product—and therefore at a lower rate than wine or spirits—which is more favorable to the industry. A change in hard seltzer’s tax classification would be detrimental to its continued growth, as would regulations controlling or limiting its distribution. While regulatory nuances between states vary slightly, the overall climate for hard seltzer’s distribution and sale is favorable.

Hard seltzer currently serves as a new entrant in a mature industry, similar to the position occupied by craft beer in the 1990s. Both of these specialist organizations rose to prominence by offering differentiated products and, therefore, by filling niches, which stands in stark contrast to generalist firms offering traditional beer to a mass-market audience. A changing landscape in consumer tastes and preferences ultimately contributes to the formation of new niches; clearly, both craft beer and hard seltzer organizations have exploited this opportunity to their benefit. Today, these sectors of the beverage industry are at different stages in their life cycles. Craft beer has cemented its legacy as a legitimate, well-established specialist, while hard seltzer is still a promising new entrant.

Hard seltzer's rise to prominence has changed the landscape of the United States beverage industry. As consumers increasingly shy away from traditional beer in lieu of more health-conscious alternatives, the founding of new hard seltzer organizations will continue to rise amidst favorable market conditions. While increasing birth rates of new organizations lend an aura of credibility to the industry, the industry's legitimacy process will eventually be surpassed by the competitive process (Singh and Lumsden, 1990). Ironically, it is the same competitive process in a population that will ultimately contribute to a decline in organizational foundings and an increase in firm mortality. Given that hard seltzer is a relatively new product and organizational foundings are still on an upward trajectory, hard seltzer has yet to enter the competitive phase. Future research should focus on monitoring hard seltzer's progression as it enters the competitive phase, as this has the potential to be a rich area of study in the years to come. Furthermore, any changes in hard seltzer's regulatory classification will certainly disrupt the industry, giving rise to potential pipelines for future analysis.

Ultimately, it is up to hard seltzer organizations to avoid suffering the same pitfalls as traditional beer firms. Hard seltzer organizations must be fully aware of the changing environmental factors that affect the overall population and be able to adapt as needed to remain relevant. While popular wisdom might argue that hard seltzer is merely a fad, the significant amount of capital invested in its success by established brands and new entrants alike suggests that this beverage type may already be too big to fail.

References

- Abbott, K., J. Green, and R. Keohane (2016), "Organizational Ecology and Institutional Change in Global Governance," *International Organization*, Vol. 70, No. 2, pp. 247-277.
- Abdool, A. C., A. Eisner, and M. Stroud (2019), "Changing Dynamics of the New York General Hospital Population: A Case of Too Much Government Interference?" *Global Journal of Management and Marketing*, Vol. 3, No. 1, pp. 84-92.
- Abernathy, W., K. Clark, and A. Kantraw (1983), "Mature" Industries Can Be Revitalized," *Research Management*, Vol. 26, No. 4, pp. 6-7.
- Allen, M. and M. Spialek (2018), "Young Millennials, Environmental Orientation, Food Company Sustainability, and Green Word-of-Mouth Recommendations," *Journal of Food Products Marketing*, Vol. 24, No. 7, pp. 803-829,
- Arthur, R. (2020), "Corona Hard Seltzer Leaps to #4 in the US: We're Just Warming Up!" *BeverageDaily.com*. Retrieved from <https://www.beveragedaily.com/Article/2020/07/02/Corona-Hard-Seltzer-leaps-to-4-in-US-hard-seltzer-category#>.
- Bernstein, J. (2019), "Like LaCroix, but with a Buzz," *The New York Times*.
- Blankenship, M. (2020), "Drinking the Claws and Beverage Laws: The Helter-Skelter of Hard Seltzer and Alcohol Regulation During COVID-19." *Sports & Entertainment Law Journal, Arizona State University*. Retrieved from <http://asuselj.org/drinking-the-claws-and-beverage-laws-the-helter-skelter-of-hard-seltzer-and-alcohol-regulation-during-covid-19/>.
- Boone, C., G. R. Carroll, and A. van Witteloostuijn (2002), "Resource Distributions and Market Partitioning: Dutch Daily Newspapers, 1968 to 1994," *American Sociological Review*, Vol. 67, pp. 408-431.

- Bruce, G. (2020), "Millennials Continue to Fuel Hard Seltzer Sales, with No Ceiling in Sight," *The Drum*. Retrieved from <https://www.thedrum.com/opinion/2020/08/27/millennials-continue-fuel-hard-seltzer-sales-with-no-ceiling-sight>.
- Bucic, T., J. Harris, and D. Arli (2012), "Ethical Consumers Among the Millennials: A Cross-National Study," *Journal of Business Ethics*, Vol. 110, No. 1, pp. 113–131.
- Budros, A. (1994), "Analyzing Unexpected Density Dependence Effects on Organizational Births in New York's Life Insurance Industry, 1842-1904," *Organization Science*, Vol. 5, No. 4, pp. 541-553.
- Carroll, G. (1985), "Concentration and Specialization: Dynamics of Niche Width in Populations of Organizations," *The American Journal of Sociology*, Vol. 90, No. 6, pp. 1262–1283.
- Carroll, G., and A. Swaminathan (2000), "Why the Microbrewery Movement? Organizational Dynamics of Resource Partitioning in the U.S. Brewing Industry." *American Journal of Sociology*, Vol. 106, No. 3, pp. 715-762.
- Coman, A., and B. Ronen (2009), "Focused SWOT: Diagnosing Critical Strengths and Weaknesses," *International Journal of Production Research*, Vol. 47, No. 20, pp. 5677-5689.
- Commission of the European Communities (2001), "Promoting a European Framework for Corporate Social Responsibilities," COM(2001) 366 Final, Brussels.
- Dammrich, J. (2020), "White Claw Hard Seltzer Introduces New Flavors, Responding to Immense Consumer Demand," CISION PR Newswire. Retrieved from <https://www.prnewswire.com/news-releases/white-claw-hard-seltzer-introduces-new-flavors-responding-to-immense-consumer-demand-301016603.html>.
- Dodd, M. E. (1932), "For Whom are Corporate Managers Trustees?" *Harvard Law Review*, (45), pp. 1145-63.
- Dukoff, S. (2020), "Hard Seltzer Rules." *Men's Health*, Vol. 35, No. 3, pp. 33-35.
- Elejalde-Ruiz, A. (2020), "Corona Bets Big on Hard Seltzers as Parent Constellation Brands Pours \$40 Million into New Line." *Chicago Tribune*.
- Freeman, M. (2019), "Time Use of Millennials and Nonmillennials," *Monthly Labor Review*, pp. 1-13.
- Gentson, A. (2020), "Millenials now Prefer Hard Seltzer Over Craft Beer." *Hard Seltzer News*. Retrieved from <https://hardseltzernews.com/2020/12/17/millennials-now-prefer-hard-seltzer-over-craft-beer>.
- Hannan, M., G. Carroll, and L. Pólos (2003), "The Organizational Niche," *Sociological Theory*, Vol. 21, No. 4, pp. 309-340.
- Hannan, M., and J. H. Freeman (1987), "The Ecology of Organizational Founding: American Labor Unions, 1836-1985," *American Journal of Sociology*, Vol. 92. No. 4, pp. 910-943.
- Hannan, M. T., and J. H. Freeman (1977), "The Population Ecology of Organizations," *American Journal of Sociology*," Vol. 82, No. 5, pp. 929–964.
- Hannan, M. T., and J. H. Freeman (1989), *Organizational Ecology*, (Cambridge, MA: Harvard University Press).
- Hobson, J., and A. Hagan (2019), "Hard Seltzer Spikes in Popularity," in *Here & Now*, produced by C. Theuri and T. Mundt. Retrieved from <https://www.wbur.org/hereandnow/2019/09/11/spiked-seltzers-spectacular-summer>.

- Hutchinson, G.E. (1957), "Concluding remarks," *Cold Spring Harbor Symposia on Quantitative Biology*, Vol. 22, No. 2, pp. 415–427.
- Iyengar, S., and M. Lepper (2000), "When Choice Is Demotivating: Can One Desire Too Much of a Good Thing?" *Journal of Personality and Social Psychology*, Vol. 79, No. 6, pp. 995-1006.
- Kendall, J. (2019), "Boston Beer Company Is Taking Truly Hard Seltzer on Tap to Bars and Restaurants," *Brewbound*. Retrieved from <https://www.brewbound.com/news/boston-beer-company-is-taking-truly-hard-seltzer-on-tap-to-bars-and-restaurants/>.
- Knizner, F. (2018), "Hard Seltzer Regulatory Considerations," *Lehrman Beverage Law*. Retrieved from <https://bevlaw.com/bevlog/hard-seltzer-regulatory-considerations/>.
- Koerner, B. (2008), "The Long, Slow, Torturous Death of Zima," *Slate*. Retrieved from <https://slate.com/human-interest/2008/11/the-long-slow-torturous-death-of-zima.html>.
- Kubota, S. (2020), "Truly Hard Seltzer Launches 4 Lemonade Flavors," *Today*. Retrieved from <https://www.today.com/food/truly-hard-seltzer-launches-4-lemonade-flavors-t171285>.
- Landsverk, G. (2021), "Gen Zers are Less Progressive Than Millennials About Gender Identity and Stereotypes, a New Survey Says." *Insider*. Retrieved from <https://www.insider.com/millennials-more-progressive-than-gen-z-about-gender-survey-finds-2021-2>.
- Lomi, A. (1995), "The Population and Community Ecology of Organizational Founding: Italian Co-Operative Banks, 1936-1989," *European Sociological Review*, Vol. 11, No. 1, pp. 75-98.
- McIntyre, D. (2020), "Unlike Most of the Country, Maryland Consumers Can't Purchase Alcohol at Grocery Stores. That May Change Soon," *The Washington Post*.
- Moore, K. (2020), "Corporate Social Responsibility: Consumers Will Remember Companies That led in 2020." *Forbes*. Retrieved from <https://www.forbes.com/sites/forbesagencycouncil/2020/07/31/corporate-social-responsibility-consumers-will-remember-companies-that-led-in-2020/?sh=5ac1c988eb65>.
- Nedelka, J. (2017), "Interview: SpikedSeltzer Co-Founder Nick Shields on Expanding," *BeverageDynamics*. Retrieved from <https://beveragedynamics.com/2017/03/22/spiked-seltzer-spiked-seltzer-nick-shields-interview-markets>.
- Negro, G., F. Visentin, and A. Swaminathan (2014), "Resource Partitioning and the Organizational Dynamics of 'Fringe Banking'," *American Sociological Review*, Vol. 79, No. 4, pp. 680-704.
- Palus, S. (2019), "Why You Can't Escape Spiked Seltzer This Summer," *Slate*. Retrieved from <https://slate.com/human-interest/2019/08/spiked-seltzer-inventor-origin-story.html>.
- Popielarz, P., and Z. Neal (2007), "The Niche as a Theoretical Tool," *Annual Review of Sociology*, Vol. 33, pp. 65-84.
- Powers, K. (2019), "Shattering Gendered Marketing," *American Marketing Association*. Retrieved from <https://www.ama.org/marketing-news/shattering-gendered-marketing/>.
- Reimer, S., M. Chapman, R. Janzen, J. Watson, and M. Wilkinson (2016), "Christian Churches and Immigrant Support in Canada: An Organizational Ecology Perspective," *Review of Religious Research*, Vol. 58, No. 4, pp. 495-513.
- Scheibehenne, B., R. Greifeneder, and P. Todd (2010), "Can There Ever Be Too Many Options? A Meta-Analytic Review of Choice Overload," *Journal of Consumer Research*, Vol. 37, No. 3, pp. 409- 425.

- Schultz, E. J. (2019), "Marketer of The Year 2019: White Claw No. 3," *Advertising Age*, Vol. 90, No. 23, p. 18.
- Schwartz, B. (2004), *The Paradox of Choice: Why More is Less*, (New York: Ecco).
- Sen, S., and C. Bhattacharya. (2001), "Does Doing Good Always Lead to Doing Better? Consumer Reactions to Corporate Social Responsibility," *Journal of Marketing Research*, (38), pp. 225-243.
- Simons, T., and P. Roberts (2008), "Local and Non-Local Prefounding Experience and New Organizational Form Penetration: The Case of the Israeli Wine Industry," *Administrative Science Quarterly*, Vol. 53, No. 2, pp. 235-265.
- Singh, J., and C. Lumsden (1990), "Theory and Research in Organizational Ecology," *Annual Review of Sociology*, Vol. 16, pp. 161-195.
- Swaminathan, A. (2001), "Resource Partitioning and the Evolution of Specialist Organizations: The Role of Location and Identity in the U.S. Wine Industry," *The Academy of Management Journal*, Vol. 44, No. 6, pp. 1169-1185.
- Swaminathan, A., and J. Delacroix (1991), "Differentiation within an Organizational Population: Additional Evidence from the Wine Industry," *The Academy of Management Journal*, Vol. 34, No. 3, pp. 679-692.
- Taylor, C. (2019), "What Makes a CSR Message Resonate with Millennials and Generation-Z?" *Forbes*. Retrieved from <https://www.forbes.com/sites/charlestaylor/2019/04/30/what-makes-a-csr-message-resonate-with-millennials-and-generation-z/?sh=582cf0d77fc7>.
- Taylor, K. (2019), "Millennials Are Shunning Beer Because They Say It Makes Them 'Fat'," *IAB Solutions*. Retrieved from <https://www.iabllc.com/feed-items/millennials-are-shunning-beer-because-they-say-it-makes-them-fat/>.
- Tempesta, M. (2020), "Alcohol Sales Help Restaurants Stay Afloat During Pandemic," *FSR*. Retrieved from <https://www.fsrmagazine.com/expert-takes/alcohol-sales-help-restaurants-stay-afloat-during-pandemic>.
- Torrey, J. (2020), "How White Claw Became the Number One Hard Seltzer in Our Minds," *Medium*. Retrieved from <https://medium.com/better-marketing/how-white-claw-became-the-number-one-hard-seltzer-in-our-minds>.
- Valinsky, J. (2019), "Beware the Claw! Beer Is Slipping. Here's What Americans Are Drinking Instead," *St. Louis Post Dispatch*.
- Vieira, E., S. Grantham, and S. Sampson (2021), "Corporate Social Responsibility and its Reporting from a Management Control System Perspective," *Managing Global Transitions*, (19), pp. 127-144.

Letter from Special Editor

Since 1988, the *Journal of Contemporary Business Issues* has served as a premium outlet for academic research in the business disciplines. A brief stroll through the [past volumes archive](#) reveals a remarkable history of scholarship covering a rich set of topics. As is the case with all publications, time can lead to changes in identity and purpose.

Beginning January 2023, I will take over as editor for the journal. I'd like to start by thanking all who volunteered to serve as reviewers, editorial board members, special editors, and financial supporters. I'd also like to recognize the work of recent editors (Jim Patterson, Jack Elfrink, Mostafa M. Maksy, and Ron Bauerly) in leading the journal to its current web-based home and for their efforts in interesting releasing special editions and relisting the journal in Cabell's. More recently, William Polley had the unenviable task of guiding the journal through the COVID pandemic years. Not least, I'd like to acknowledge all contributors, authors, and readers without whom the outlet could not have survived.

Changes in readership demand changes in mission. The coming year brings a significant rebranding of this journal to improve the outlet's reach and raise its profile. Among potential changes are renaming the journal, new article formatting requirements, establishing an external review board, real-time online publishing, and listing the journal on multiple directories/trackers. While challenging, these initiatives should increase the visibility of articles (including citations), speed up the editorial and peer-review processes, and generally improve the dissemination of research.

I look forward to building on the three-decade legacy of the journal and sincerely hope that it will continue with a reputation as a successful and attractive general interest outlet for academic research in the business fields.

Respectfully submitted,

J. Jobu Babin, Ph. D.
Incoming Editor

USING LINKEDIN TO RECRUIT STUDENTS AND ENGAGE ALUMNI

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The high demand for accounting majors places pressure on accounting programs to successfully recruit and retain a large number of students. The purpose of this commentary is to explain why LinkedIn can help accomplish these endeavors. Tips on using LinkedIn are given to increase efficiency and effectiveness when working with this resource. Alumni's employment information obtained via LinkedIn is valuable for recruiting endeavors while being an important instrument for improving alumni relationships and furthering the documentation of accounting programs' success.

Recruiting Students

According to AICPA (2019), the average number of bachelor graduates in accounting increased from 40,575 during the 1999-2008 period to 55,772 during 2009-2018. Despite the increase in graduates, the labor market for accounting majors remains very tight. The unemployment rate for accountants and auditors is 1.4% compared to a national rate of 3.5 (Robert Half, 2020a). The optimistic job market for accounting majors helps academic programs attract new students while retaining existing ones.

There are two sources of new student recruits. External candidates consist of high school students as well as adult learners who want to return to school. How can a program better position itself to attract these potential students? Job placement after graduation is an important factor in university selection by high school students (Angulo, Pergelova, and Rialp, 2010). The internal source consists of the students at the university but not currently majoring in accounting. Young (2002) reports that key considerations for determining a major include good job opportunities and enjoyable job responsibilities. Despite the importance of career opportunities in selecting a major, 67% of non-accounting majors do not have a discussion of accounting career opportunities when taking the Principles of Accounting course (Mauldin, Crain, and Mounce, 2000). Accounting programs, therefore, should find opportunities to have such discussions with students at campus-wide events where departments meet with students exploring (or switching) majors and in the Principles of Accounting course. Aggregate salary data (e.g., the Salary Guide for Accounting and Finance Professionals published by Robert Half (2020b)) on various career paths in accounting helps enrich the discussions of various career opportunities. To make the conversations more relatable, accounting programs can consider providing the information about career paths of their alumni.

Using LinkedIn to Collect Alumni Career Path Data

There are several reasons why accounting programs can use LinkedIn to establish a dataset of their alums' career paths. The first reason is related to the significant role of LinkedIn

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in the business community. Workers use the networking site to keep in touch with clients as well as help identify and apply for new positions; companies use LinkedIn to promote their brands and recruit for open positions. Given that both workers and companies have the motivation to use this resource, it is not surprising that 77% of recruiters list LinkedIn as being the most-used channel of their recruiting efforts (Jobvite, 2018). The second reason for selecting LinkedIn for this discussion is the demographic group that utilizes LinkedIn. Approximately 50% of college graduates in the U.S. use LinkedIn (Perrin and Anderson, 2019). Such a user profile increases the likelihood of an accounting program connecting to alumni.

The third reason ties to the information content of the networking site. LinkedIn members often display a professional profile that includes career progression through different positions, professional responsibilities, professional certifications, etc. Such information can help accounting programs identify among their alumni ideal speakers for campus events and demonstrate potential career paths to current students. Despite the potential benefits, it is surprising that only 30.3% of public and 43.8% of private AACSB-accredited business schools utilize LinkedIn (Case and King, 2014).

Tips on Conducting LinkedIn Analysis

LinkedIn Profile Search

A search of LinkedIn profiles can be conducted by a faculty member via his/her personal LinkedIn account. Selecting one faculty member helps define clearly the responsibility for the search process and subsequent updating of information. A potential downside of this approach involves re-acquiring connections when the selected faculty member leaves the program. Alternatively, the program can establish its own LinkedIn page and allow current faculty to be administrators. There are potential issues with this approach. For example, the university may prefer a single LinkedIn page for the school of business rather than an individual page for each program.

The search process is the same for both abovementioned approaches. In the following discussion, the process is generally referred to as being conducted by an accounting program. The search process starts with a list of LinkedIn profiles. The selling points of accounting programs are with respect to not only the quality but also the number of exceptional career paths of their graduates. It is, therefore, advisable to search for LinkedIn profiles of all alumni by graduation year. A combination of a basic search of student name and the School filter listed under the All Filters tab makes it efficient to search through LinkedIn's database. Despite the size of LinkedIn memberships, it is still probable that a program fails to identify a large number of students in the search process. For example, some female students may have changed their last names after getting married; many alumni who graduated before the inception or popularity of LinkedIn. The alumni who cannot be identified via LinkedIn should be recorded for further search via other channels.

After a LinkedIn profile is identified, I recommend that data collection precede LinkedIn connection requests. The reason is that invitation requests may entail a wait for acceptance. A prolonged wait is usually associated with requests sent to inactive accounts. The following is a list of essential information that should be collected for each alumnus: LinkedIn Connection Status (Connected, Requested, or Unable to Find), Professional Certifications (e.g., CPA), Current Job Title, Current Company with the geographical location, First Job Title, Graduation Year, and Additional Academic Degrees (e.g., other majors/minors, Masters).

LinkedIn Requests

Is a LinkedIn request beneficial after the collection of desired data? Yes, the acceptance of LinkedIn requests is helpful for updating the alumni information. After a LinkedIn request is accepted, a notification will be sent automatically on updates in the profile (e.g., new job titles, change of companies, obtaining of certifications). This allows the program to maintain an updated record of its graduates' career path development. Upon receiving the notifications, the program can send a congratulation message along with the solicitation of the alumni's interest in speaking to accounting student organizations and participating in campus networking events. LinkedIn connection gives accounting programs more opportunities to interact with alumni.

LinkedIn advises personalizing the invitation to join the network established by the program. This advice should be taken given the amount of time it takes to identify a graduate and the potential benefits of an accepted request. Note that personalization does not necessarily require detailed memories of a student. Instead, it simply suggests that the standard request message of "please join my network" has a lower probability of securing a request acceptance. One recommendation is to use this as an opportunity to explain to the student the purpose of the LinkedIn request as well as the benefits of connecting with other alumni by joining the network of the accounting program. Such personalized message represents an expression of interests in alums' career paths and development and thus helps strengthen the tie between the program and its graduates.

Other LinkedIn Connections

While requesting its alumni to join its network, an accounting program may receive requests from others looking to join the network. To maintain the credibility of the LinkedIn account, caution should be taken when deciding to accept requests from unfamiliar individuals. I recommend accepting requests from human resource professionals and other accounting/finance professional contacts to maximize the potential of career advancement for connected alumni. For the requests from students early in their academic career (e.g., Freshmen and Sophomores), the connection decision may be subject to certain requirements, such as having passed at least one accounting course. If a student does not meet the criteria, it is recommended to respond to their requests with an explanation of the program's policy on accepting LinkedIn requests. Such detailed messages can be sent via the Message link that is located under the Manage All tab in the Invitations section.

Recommended Uses of LinkedIn Information

Career Path Analysis

Accounting programs can utilize alumni information obtained from LinkedIn to conduct the analysis of their graduates. A list of first full-time job titles of alumni helps demonstrate the flexibility of the accounting degree. For student recruits who do not view the two most known career tracks within accounting -- audit and tax -- as their top career choice, the diversity of early career opportunities for alumni may raise interest in the program. In addition, the initial employment data can help accounting programs identify companies for future student organization events. Routine communication with these employers allows the programs to get feedback on how to better prepare their students and make curriculum decisions.

Career progression data provides student recruits with a clear picture of how accounting majors grow into management-level positions. The evolution of alumni's job titles presents

relatable examples and may serve as a guide to achieving specific career goals. Also, a combination of the percentage of alumni remaining in public accounting for their entire career and employment after leaving public accounting helps present the trend of career progression in accounting. With the information, the program can guide current accounting students to develop a reasonable career plan and maximize their opportunities in the job market. In addition, the career progression data can be used to document *Career Success of Graduates Beyond Initial Placement*, one example of Bachelor's/Master's Level Education Impact metrics listed in the AACSB Standards of Accreditation (AACSB International, 2018).

Recruiting Promotions

Accounting programs can create impactful recruiting materials from the career progression information collected via LinkedIn. For example, a list of typical positions held by alumni is a display of a program's success and thus can be posted on the program's website to help student recruits better understand its quality. Also, accounting programs should be proactive in getting the information disseminated to a broad audience. One recommendation is to contact local high schools to inquire about sharing the information with their students. The recruiting materials also can be distributed at high school visit days as well as in both introductory business and introductory accounting courses.

It is expected that the recruiting materials lead to follow-up conversations between interested students and faculty. These conversations help the programs to have better knowledge of student recruits' career aspirations. With an extensive database of alumni's career paths, accounting programs can better relate a student's career aspirations to an example of a graduate's career path. Thus, appropriate alumni can be identified through LinkedIn connections and be contacted to meet with or mentor a student.

Conclusion

The future of the accounting profession is closely tied to the ability of accounting programs to attract quality students. This commentary details why LinkedIn can be a useful tool in these efforts and provides suggestions on how to conduct LinkedIn analysis in an effective and efficient manner. Alumni employment information collected via LinkedIn helps document career paths of a program's graduates and thus can be relatable and aspiring for student recruits. Meanwhile, LinkedIn connection improves alumni engagement in the program.

References

- AACSB International. (2018), "Business Standards 2018 Update," Accessed March 11, 2020. <https://www.aacsb.edu/accreditation/standards/business>.
- AICPA. (2019), "Trends in the supply of accounting graduates and the demand for public accounting recruits." Accessed March 11, 2020. <https://www.aicpa.org/interestareas/accountingeducation/newsandpublications/aicpa-trends-report.html>.
- Angulo, F., A. Pergelova, and J. Rialp. (2010), "A market segmentation approach for higher education based on rational and emotional factors," *Journal of Marketing for Higher Education*, (20:1), pp. 1-17.
- Case, C. J., and D. L. King. (2014), "The status of social networking at the AACSB accredited schools of business," *Academy of Educational Leadership Journal*, (18:1), pp. 39-46.
- Jobvite. (2018), "Jobvite recruiter nation report 2018," Accessed March 11, 2020. <https://www.jobvite.com/wp-content/uploads/2018/11/2018-Recruiter-Nation-Study.pdf>.
- Mauldin, S., J. L. Crain, and P. H. Mounce. (2000), "The accounting principles instructor's influence on students' decision to major in accounting," *Journal of Education for Business*, (75:3), pp. 142-148.
- Perrin, A., and M. Anderson. (2019), "Share of U.S. adults using social media, including Facebook, is mostly unchanged since 2018," Accessed March 11, 2020. <https://www.pewresearch.org/fact-tank/2019/04/10/share-of-u-s-adults-using-social-media-including-facebook-is-mostly-unchanged-since-2018/>.
- Robert Half. (2020a), "Make the most of the low accountant unemployment rate," Accessed March 11, 2020. <https://www.roberthalf.com/blog/job-market/a-look-at-the-quarterly-accountant-unemployment-rate>.
- Robert Half. (2020b), "2020 Salary guide for accounting and finance professionals," Accessed March 11, 2020. <https://www.roberthalf.com/salary-guide>.
- Young, M. R. (2002), "Choice-based segmentation as an enrollment management tool," *Journal of Marketing for Higher Education*, (12:2), pp. 69-83.

COCA-COLA CHOCOLATE ANYONE? THE IMPACT OF BRAND TRUST ON BRAND VERSATILITY

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The strength of a brand can conceivably be estimated by the acceptance of a brand's offering in categories perceptually distant from the brand's home category. As marketers attempt to leverage brand equity by extending brands into new and sometimes distant categories, brand versatility grows dramatically in importance. The present study extends previous work on brand versatility and investigates the mediating role of brand trust upon brand versatility, particularly brand reliability and brand intention. Findings indicate that while the emotional elements typically associated with brand intention have historically been viewed as key elements surrounding brand versatility, it is the rational elements and brand reliability that may prove to be of paramount importance when contemplating brand extension into distant brand categories.

Introduction

While many brands are content to remain within relatively narrow, well-defined product categories, others take advantage of their brand equity and successfully venture into categories quite distant from their roots. Substantial brand equity, or the “set of assets linked to a brand's name that adds to or subtracts from the value of a product or service” (Deshpande & Keinan, 2019), provides opportunities for brands to explore launching offerings in categories perceptually far from their home category. For instance, Amazon Studios is a foray by Amazon into movie making, which is a far cry from e-tailing yet is quite successful. As another example, consider that the brand Philips straddles across household, personal care, health, consumer electronics, and lighting, moving from toothbrushes to car headlights with panache. Toshiba is yet another versatile brand with considerable mindshare and acceptance across a wide swathe of categories, from IoT to semiconductors and from printers to nuclear power turbines and generators. General Electric (GE) has notable positions within industries as diverse as aviation, healthcare, renewable energy, and home appliances. Crest, on the other hand, while a dominant brand in the oral care arena, once having as many as 52 different versions on the market (Haig, 2011), is hard pressed to expand beyond the oral care category. Heinz is similarly a one trick pony with no offerings beyond condiments.

Brand Versatility

Krishnan et al. (2016) define *brand versatility* as the acceptance of a brand's offering in a category perceptually distant from its home category. In their article, they develop an objective measure for the perceptual distance between product categories, thereby deriving perceptual distance from respective home categories for four popular brands Nike, Apple, Coca-Cola, and McDonald's (Krishnan et al., 2016, Table 1, p.69). A follow-up study assessed purchase intention for a hypothetical product at varying perceptual distances from the respective home

categories and computed brand versatility as the average rate of degradation in purchase intention for a product in a category just beyond the 50th percentile perceptual distance away from the respective home category for each brand. For instance, the diet supplement category falls at 51.74 percentile perceptual distance from the home category of athletic shoes for brand Nike. The authors showed that the brand versatility for Nike to be .195 or about 20%. That is, the rate of degradation of purchase intention between the home category and one at 51.74 percentile perceptual distance is about 20%. In contrast, the brand versatility for Coca-Cola is 11.9%. In other words, the brand Coca-Cola suffers lesser degradation and consequently is more versatile than the Nike brand. Using the empirically derived perceptual distances reported in Krishnan et al. (2016, Table 1, p.69), the present study replicates and investigates the mediational role of brand trust on brand versatility.

In evaluating a brand's versatility, the consumer should be concerned about a brand's ability or capacity to deliver in the new category. For instance, if Sony were to offer hand tools, the consumer should be assessing if Sony, the brand primarily known for consumer electronics, is competent enough to produce reliable and durable tools. Therefore, the greater the perception of brand reliability, the greater the consumer's acceptance of the brand in the new category.

Extremely well-positioned and established brands may reach a point where the brand name itself becomes synonymous with the category in which the brand competes or the function that its products serve. For example, someone could ask a colleague to "Xerox" a document as opposed to photocopying it or reach for a "Band-Aid" to cover a minor scratch when nearly any adhesive bandage would suffice. In such cases, some dominant brands may be limited to a particular category, with few brand extension opportunities and possessing very little brand versatility. Other brands may be able to successfully leverage their brand equity and extend their brands outside their defining categories. Such brands would be considered quite versatile and capable of leveraging their brand equity with successful brand extensions.

Even dominant brands such as Harley-Davidson can make mistakes when attempting to expand into categories too far from their reach. Harley-Davidson's appeal is essentially masculine and so strong that some owners go so far as to tattoo the brand mark onto their bodies. The brand's versatility has been successfully displayed with extensions into such diverse categories as clothing, jewelry, drinkware, luggage, and home furnishings. But when Harley-Davidson attempted to extend its brand into a line of aftershave and perfume products, it failed miserably. The same fate fell upon their attempt to brand a line of Harley-Davidson wine coolers. Aftershave, perfume, and wine coolers do not align with the Harley-Davidson brand characterized as having masculine, rugged values (Haig, 2011). Thus, even brands with the exceptional versatility of Harley-Davidson have limitations that preclude the brand from extending into more distant categories.

Another extraordinarily versatile brand synonymous with successful brand extensions, Virgin, also failed in its attempted brand expansion into the soft drink category with Virgin Cola. As Richard Branson, founder of Virgin, stated,

"One of the reasons Virgin's enterprises have been successful over the years is that we empower the staff to make mistakes – and then learn from them. This ability to bounce back after a setback is the single most important trait an entrepreneurial venture can possess. If innovation is at the heart of your business, obstacles come with the territory. How you react to and navigate those hurdles will make the difference between failure and success."

I've been lucky enough to helm many successful companies, but I'm the first to admit that I've also directed a few that failed. You may have heard of Virgin Cola, a company we formed in the 1990s to take on the industry's two big powerhouses: Coca-Cola and PepsiCo.

We attempted to shake up the market in true Virgin fashion but it didn't work. From the outset, we faced distribution issues – we couldn't get Virgin Colon on the shelves in the numbers needed to make an impact and achieve economies of scale.

We certainly didn't lack enthusiasm, but we quickly learnt that the two giants had a firm grip on the market. It was tough to find their weaknesses. Taking on two of the biggest brands in the world, both of which proved to be anything but complacent, was a tremendous less for all of us". (Haig, 2011, pp. 75-76)

McDonald's, a dominant brand synonymous with fast food restaurants, also learned that outstanding brand equity in one category does not guarantee success in more distant categories. When McDonald's opened two Golden Arch hotels in Switzerland, it soon learned that it did not have the brand versatility necessary to be successful in the hospitality category. While McDonald's may have had the required operational capabilities to operate a hotel, the McDonald's brand was not versatile enough to be successful outside of the restaurant, or even the quick service restaurant, brand category (Gray, 2014).

Furthermore, brands with dominant positions within a given category but narrowly perceived can also limit their brand versatility. Life Savors' unsuccessful foray into the chewing gum and soda categories clearly illustrates that a strong brand position does not directly equate to strong brand versatility (Haig, 2011; Keller, 2013).

Positioning a brand based primarily upon the product that the firm manufactures ("We produce the world's highest-grade gasoline.") as opposed to corporate capabilities ("We are the most technologically advanced energy provider.") can play a major role in enhancing brand versatility.

As lifecycles shorten and markets become more heterogeneous and competition intensifies, the need to establish well-defined brand positions becomes imperative. However, firms must be aware that narrowly positioning a brand within a well-established and mature category carries with it the risk of limiting brand versatility and the ability to grow outside the base category. Indeed, there may even be a question of brand survival should the base category become irrelevant. And without adequate brand equity, dominant positions within a base category or related categories is not possible. One must remember that brand equity can be either negative or positive. With negative brand equity, customers react less favorably to product promotions, while positive brand equity causes customers to react favorably (Deshpande and Keinan, 2019). And while David Aaker has clearly categorized the key dimensions of brand equity across products and markets (Loyalty, Perceived Quality/Leadership, Associations/Differentiation, Awareness, and Market Behavior) (Aaker, 1996), other brand elements can significantly impact brand preferences.

Notable studies detail the mechanisms by which a brand generates preference through brand trust and brand love (Delgado-Ballester et al., 2003; Carroll and Ahuvia, 2006; Sung and Kim, 2010; Huang, 2017; Karjaluoto et al., 2016; Menidjel et al., 2017). A key finding in this research stream is that trust in a brand contributes to a "love" of the brand in so much as a consumer forms a "passionate, emotional attachment" (Carroll and Ahuvia, 2006) with the brand. Brand love, in turn, can elicit positive word of mouth even as price and experience moderate the effect (Karjaluoto et al., 2016). In addition, brand trust has been examined as far as its effect on brand

loyalty and found to have very positive associations (Delgado-Ballester et al., 2003; Sung and Kim, 2010; Huang, 2017; Menidjel et al., 2017) such that brand trust leads to brand loyalty even in the presence of various moderating and mediating variables.

In the present investigation of brand trust's effects on brand versatility, the Brand Trust Scale (BTS) that was tested and validated by Delgado-Ballester, et al., 2003 was adopted. In the scale, the authors examine two components of brand trust: Brand Reliability and Brand Intention. Brand Reliability is an assessment of a brand's ability or competency to deliver on the brand promise. Even if the intentions are benevolent, a well-meaning brand that is not capable cannot be trusted to deliver. The scale captures the extent to which a consumer considers a brand to be one that consistently and predictably meets the needs of the consumer and will never "let you down." Brand Intention captures the consumers' belief that the brand will act in the consumers' interest and will not exploit their vulnerabilities, cut corners or act in guile to deceive. Whereas brand reliability is a rational facet, brand intention is the emotional connection.

Research Hypotheses and Methodology

The research focus of this study is to unpack the mediation paths for brand versatility by considering the effect of brand trust and its components: Brand Intention and Brand Reliability. In order to better assess the inherent impact of brand trust and brand intention upon brand versatility, the following hypothesis will be tested:

H1: Brand reliability, as a component of brand trust, will have a mediating effect on brand versatility.

In evaluating a brand's versatility, a consumer should be concerned with a brand's intention and willingness to act in the consumer's best interest in the new category. For instance, were hand tools offered by Sony, the consumer should be assessing if Sony, the brand primarily known for consumer electronics, will honestly and benevolently act in being transparent in its efforts in the new category. If Sony does so in a well-meaning way, the greater the brand intention and, therefore, the greater the consumer's acceptance of the brand in the new category. Therefore,

H2: Brand intention, as a component of brand trust, will have a mediating effect on brand versatility.

Methodology

A total of 429 participants (upper-division undergraduate students from a large, public university in the United States) were each presented with five hypothetical offers from Apple, Coca-Cola, Nike, and McDonald's at different perceptual distances. The present study deployed the perceptual distances from the home categories for these brands as empirically established by prior research (Krishnan et al., 2016). In all, each participant rated five offerings X 4 brands = 20 total offers for perceptual intention. The order of presentation of the brands and the hypothetical offers at different perceptual distances were randomized for each participant.

Measures: Participants rated intention-to-purchase for each hypothetical offer from each brand on the three-item scale as in prior research (Krishnan et al., 2016). Participants also rated each brand on the Brand Trust Scale developed by Delgado-Ballester et al. (2003): (1 Strongly Disagree – 7 Strongly Agree)

Brand Reliability items:

1. (X) is a brand name that meets my expectations;
2. I feel confidence in (X) brand name;
3. (X) is a brand name that never disappoints me;
4. (X) brand name guarantees satisfaction.

Brand Intention items:

1. (X) brand name would be honest and sincere in addressing my concerns;
2. I could rely on (X) brand name to solve the problem;
3. (X) brand name would make any effort to satisfy me;
4. (X) brand name would compensate me in some way for the problem with the (product) providing ratings both for brand reliability and brand intention.

Analysis and Results

To replicate previous findings from Krishnan et al. (2016), an analysis was conducted via a repeated-measures ANOVA on brand versatility with brand as a within-subjects variable. Results show a significant effect of the brand-on-brand versatility ($F(3, 1281) = 53.55, p < .000$). Follow-up pairwise brand versatility comparisons with Bonferroni correction tests were significant except between McDonald's and Nike brands, replicating previous findings (Krishnan et al., 2016). Next, mediation analysis was conducted with Brand as the independent variable (represented by dummy variables $X_1, X_2, \text{ and } X_3$) on Brand Versatility, which is the dependent variable; mediated by the two competing facets of trust (Reliability and Intention).

Mediation is evidenced in the Baron and Kenney (1986) paradigm when the inclusion of the mediator dims or washes away the main effect. This procedure for mediation detection involves several OLS regressions that assume errors are not correlated. This is not a valid assumption for clustered data used in within-subject designs, such as the present study. Multi-level mediation models (Krull and Mackinnon, 2001; Mackinnon et al., 2004) account for this clustering and heterogeneity and adopt an alternative equivalent procedure to establish mediation. Mediation is evidenced when the indirect path represented by the product $\beta_1\beta_3$ is significant, where β_1 represents the influence of an independent variable on the mediator, and β_3 is the influence of the mediator on the dependent variable with the independent variable in the model. However, the distribution for $\beta_1\beta_3$ is not known or analytically derivable and therefore needs to be derived through *bootstrapping* techniques.

The present study used the mediational process V 3.5 (Hayes, 2018) with brand versatility as the dependent variable, the dummy-coded brand as the independent variable, and brand trust (Delgado-Ballester et al., 2003), measured by brand reliability and intention as mediators. Figure 1 shows the expected paths between the variables.

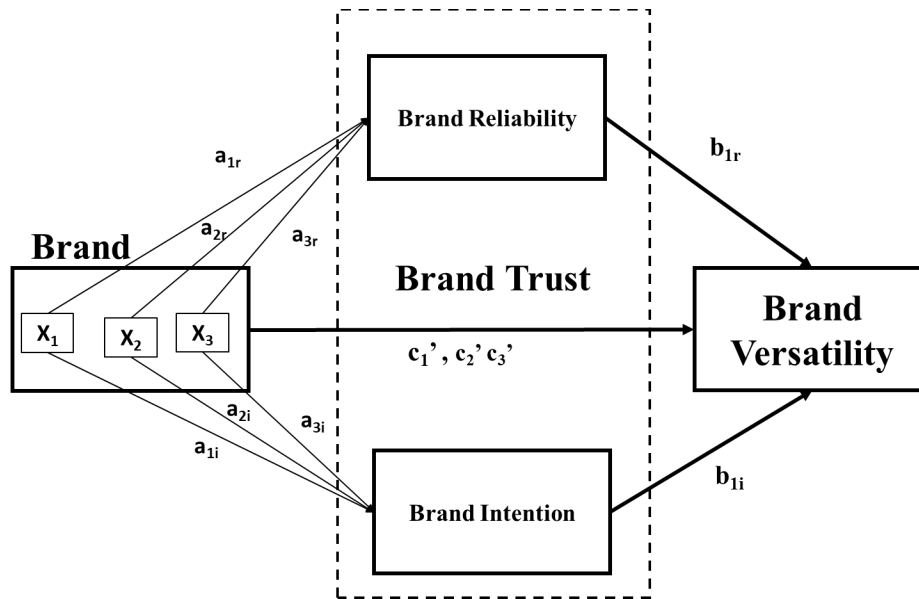


Figure 1: Hypothesized Model

Bootstrapping involves resampling the data with replacement. Typically, n cases are resampled several times where n is the actual sample size and the model estimated, thereby generating a synthetic distribution for $\beta_1\beta_3$. These estimates are ordered from smallest to largest, and the values at 2.5% and 97.5%, respectively, serve as the confidence intervals. A significant mediation is indicated if this interval *excludes* zero-value. In this study, bootstrapping was conducted by resampling the data with replacement. Four hundred and twenty-nine cases were resampled 5,000 times, and the model estimated, thereby generating a synthetic distribution for all the product betas. Because brands are represented by the dummy variables taken together, a significant result for at least one of the products $a_{1r}b_{1r}$, $a_{2r}b_{1r}$, or $a_{3r}b_{1r}$ would indicate mediation by brand reliability; similarly, a significant result for at least one of the products $a_{1i}b_{1i}$, $a_{2i}b_{1i}$, or $a_{3i}b_{1i}$ would indicate mediation by brand intention. Results show brand reliability mediation influence (Figure 2 and Table 1) but no mediation influence of brand intention.

It is important to point out that the erstwhile Sobel's Z test to determine the mediational significance of X on Y assumes that the sampling distribution of ab is normal. Hayes (2018, p 97.) notes that this assumption is rather stringent and is often violated. Therefore, a synthetic sampling distribution as described above for ascertaining the significance of the mediational coefficient ab is more reliable. Hayes (2018, p 97).

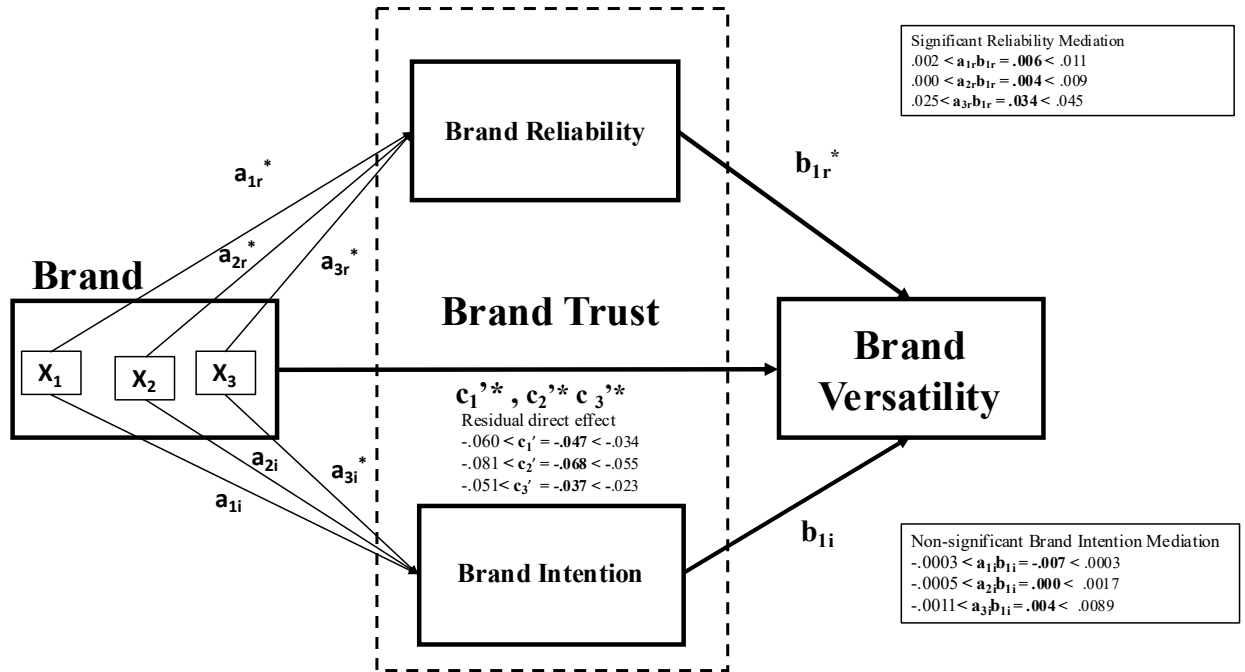


Figure 2: Mediation Results of Brand on Brand Versatility through Brand Trust

Table 1: Results of the Mediation Analysis

Coefficient(s)	Effect	t-value	p-value	Lower CI (2.5%)	Upper CI (97.5%)	Remark
a _{1r}	-1.009	-2.68	.007	21.23	22.27	Significant; intervals do not include zero
a _{2r}	-.681	-1.81	.070	-1.418	.057	
a _{3r}	-5.732	-15.24	.0001	-6.470	-4.995	
b _{1r}	-.006	-7.76	.0001	-.008	-.005	
a _{1r} b _{1r}	.006	-	-	.0017	.0109	Significant; intervals do not include zero
a _{2r} b _{1r}	.0041	-	-	.0001	.0085	
a _{3r} b _{1r}	.0342	-	-	.0245	.0450	
a _{1i}	.573	1.57	.12	-.142	1.289	Not significant; intervals include zero
a _{2i}	-.298	-.82	.42	-1.014	.417	
a _{3i}	-2.928	-8.03	.0001	-3.643	-2.213	
b _{1i}	-.001	-1.64	.10	-.003	.003	
a _{1i} b _{1i}	-.0007	-	-	-.0025	.0003	Not significant; intervals include zero
a _{2i} b _{1i}	.0004	-	-	-.0005	.0017	
a _{3i} b _{1i}	.0038	-	-	-.0011	.0089	

Findings

The mediation analysis from our study reveals that in evaluating a brand's versatility, the consumer is primarily concerned with a brand's ability or capacity (in other words, the brand's reliability) to deliver in the new category and evaluates whether the brand is competent enough to produce reliable and durable offerings in the distant category; therefore, H1 is supported. A brand's intention and willingness to act in a consumer's interest in the new category by itself does not make a brand versatile; in other words, H2 is not supported. In making the brand extension decision, the brand managers are typically preoccupied with the possible negative spillover effects on the perceptions of the brand in its present category. However, the flipside of the question is whether the brand will succeed in the new category. Clearly, based on this analysis, consumers view brand versatility as a rational brand reliability issue rather than an emotional brand intention issue.

Interestingly, results show that the **b** path for the brand intention mediator is not significant, and some readers may interpret this as the primary reason for the non-significant mediation by brand intention. However, this is a sampling artifact and a coincidental result. The only statistic of consequence in interpreting mediation is the product significance of the **ab** path regardless of individual significances of **a** and/or **b** paths. In other words, as long as **ab** is not significant, mediation is rejected even if both **a** and **b** paths are individually significant.

Discussion

The importance of brand equity, or value, is growing among both academics and practitioners alike, but methods by which a brand's value is ascertained can vary significantly among organizations responsible for estimating those brand values. A firm's brand, and the equity inherent in the brand, is arguably the most valuable asset at a firm's disposal. Brand equity, a customer's subjective and intangible assessment of the brand, above and beyond its objectively perceived value (Rust et al., 2004), if substantial, can be leveraged in a wide variety of marketing initiatives. And customer-based brand equity--the differential effect that brand knowledge has on consumer response to the marketing of the brand (Keller, 2013), if of substantial strength, can have a dramatic impact upon a host of corporate metrics.

As product lifecycles shorten, markets expand, fragment, and become inherently more heterogeneous, a brand's ability to compete in a larger number of market segments and categories becomes imperative. Therefore, a brand's versatility, or its capacity to easily appeal to new segments and enter new product and market categories, grows in importance with firms' growth objectives.

A recent example of pushing the brand versatility envelope is that of Arby's Fries Vodka (Pomranz, 2021). Since vodka is primarily made from potatoes, the folks at Arby's seemed to think its customers would love to imbibe in Curly Fry- and Crinkle Fry- flavored vodkas. Will the fast food restaurant be able to transfer its reliable branded position in that category to the hard liquor category? This will be an endeavor worth monitoring.

While measuring brand equity is a study within itself, understanding and measuring brand versatility brings with it a unique set of challenges. Ever-changing markets and competitors place greater importance upon brand versatility as a brand's strength is a measure of its current value, and the brand's versatility is a measure of its future sustainable value.

The ability of a brand to expand into and successfully compete in categories outside of its base category cannot, therefore, be overvalued. As powerful as the Google brand may be, Alphabet decided to house its autonomous automobile unit under Alphabet and brand it as Waymo. Watching Apple succeed with extensions ranging from computers to mobile phones speaks highly of not only Apple's technical capabilities but its brand versatility as well. Microsoft, on the other hand, a firm that is more than technically competent, appears less capable of expanding far beyond its base category of operating systems and software.

With consumers being primarily concerned with a brand's *reliability to perform* in new categories, as opposed to its *intention and willingness to act in a consumer's interest*, it becomes more obvious that they consider brand versatility in a more rational than emotional perspective. And while positioning based primarily upon emotional criteria can lead to notable margins and brand loyalty, such attachments may not prove as beneficial when extending the brand into more distant categories.

Whether a firm is faced with growth opportunities in new market categories or shrinking base categories, the versatility of its brands will be key to the future of the firm. As the importance of brand versatility grows and garners acceptance, it is also critical that further research be conducted to better explain *why* some brands are more versatile than others. A host of mediating factors can be involved with each aspect of versatility, and a better understanding of would certainly enhance the branding initiatives of virtually any firm.

For example, failures such as Coca-Cola fashionwear, Colgate kitchen entrees, or Cosmopolitan (magazine) yogurt (Personadesign, 2018) were due in large part to the respective lack of brand reliabilities in the new categories. Prospective consumers may have felt that Coca-Cola simply did not possess the brand reliability necessary to compete in the fashion market, nor did the Colgate and Cosmopolitan brands have the required reliability in the grocery aisle.

Future research should also consider the extent to which the strength of brand awareness in one category could hamper a brand's extension into another category. When the brand becomes an exemplar, it seems to diminish the level of versatility the brand could have in other categories. In other words, the brand becomes so well known in its parent category that consumers are unable to envision the brand in a totally separate category, thereby weakening its brand versatility. Instead of becoming the brand exemplar based on features and attributes, perhaps the brand should position itself on the goal that the consumer is hoping to achieve by using or adopting the brand. This could allow the brand to then be able to extend into another category based on the user's goal and showcase its reliability in achieving the desired goal.

Decisions, such as that of Arby's, regarding brand extensions can be extremely expensive and have a dramatic impact on a brand -- whether the extensions are successful or not. Considerations regarding perceptual distance between the home and target categories, target market demographics and psychographics, and brand reliability as it relates to trust are crucial and should be included among the many metrics evaluated prior to embarking upon any brand extension.

References

- Aaker, D., (1996). "Measuring Brand Equity Across Products and Markets", *California Management Review*, Spring, Vol. 38, No. 3.
- Baron, R.M. and Kenney, D.A. (1986). "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic and Statistical Considerations", *Journal of Personality and Social Psychology*, Vol. 51 No.6, pp. 1173-1182.
- Carroll, B. and Ahuvia, A.C. (2006). "Some Antecedents and Outcomes of Brand Love". *Marketing Letters*, Vol. 17, pp. 79-89.
- Delgado-Ballester, E., Munera-Aleman, J.L. and Yague-Guillen, M.J. (2003). "Development and Validation of a Brand Trust Scale", *International Journal of Market Research*, Vol. 45, Quarter 1, pp. 35-53.
- Deshpande, R. and Keinan, A., (Revised 2019, Publication date 2014). "Brands and Brand Equity" *Harvard Business Publishing*
- Gray, R. (2014). *Great Brand Blunders, The Worst Marketing and Social Media Meltdowns of All Time...and How to Avoid Your Own*, Crimson Publishing Ltd., Great Britain.
- Haig, M. (2011). *Brand Failures: The Truth About the 100 Biggest Branding Mistakes of All Time, 2nd Edition*, KoganPage, London,UK, Philadelphia, PA, New Delhi, India
- Hayes, A. F. (2018). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. Guilford publications, New York, NY.
- Huang, C. (2017). "The Impacts of Brand Experiences on Brand Loyalty: Mediators of Brand Love and Trust", *Management Decision*, Vol. 55, No. 5, pp. 915-934.
- Karjaluoto, H., Munnukka, J. and Kiuru, K. (2016). "Brand Love and Positive Word of Mouth: The Moderating Effects of Experience and Price", *Journal of Product & Brand Management*, Vol. 25, No. 6, 527-537.
- Keller, K.L. (2013). *Strategic Brand Management: Building, Measuring, and Managing Brand Equity*, 4th edition, Pearson, Boston.
- Krishnan, V., Sullivan, U.Y., Aurand T., (2016), "The Incorporation of Brand Versatility in the Assessment of Brand Value: Gender and Brand Category Extension Considerations", *Academy of Marketing Studies Journal*, Vol. 20, No. 1.
- Krull, J.L. and MacKinnon, D.P. (2001). "Multilevel Modeling of Individual and Group Level Mediated Effects". *Multivariate Behavioral Research*, Vol. 36, No. 2, pp. 249-277.
- MacKinnon, D.P., Lockwood, C.M. and Williams, J., (2004). "Confidence Limits for the Indirect Effect: Distribution of the Product and Resampling Methods", *Multivariate Behavioral Research*, Vol. 39 No. 1, pp. 99-128.
- Menidjel, C., Benhabib, A. and Bilgihan, A. (2017). "Examining the Moderating Role of Personality Traits in the Relationship Between Brand Trust and Brand Loyalty", *Journal of Product & Brand Management*, Vol. 26, No. 6, pp. 631-649.
- Personadesign (2018). "Brand Flops: 5 Lessons Brand Managers Can Learn From Epic Brand Failures", <https://www.personadesign.ie/brand-flops-5-lessons-brand-managers-can-learn-epic-brand-failures/> (Accessed on 31 October, 2018).
- Pomranz, Mike (2021). "Arby's Is Releasing Two French Fry-flavored Vodkas," *Food and Wine*, <https://www.foodandwine.com/news/arbys-curly-fries-vodka> (Accessed on 11 November, 2021).
- Rust, T., Zeithaml, V., and Lemon, K. (2004). "Customer-Centered Brand Management", *Harvard Business Review*, September 2004, pp. 110-118.
- Sung, Y. and Kim, J. (2010). "Effects of Brand Personality on Brand Trust and Brand Affect", *Psychology & Marketing*, Vol. 27, No. 7, pp. 639-66.

THE EFFECTIVENESS OF ADVERTISING APPEALS IN REDUCING MUSIC PIRACY: A COMPARISON OF RATIONAL, FEAR, AND GUILT APPEALS

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The purpose of this study was to determine what types of advertising appeals would be most effective at reducing the occurrence of music piracy. One hundred and sixty-five college students viewed a digital advertisement employing either a rational, fear, or guilt appeal for a fictitious music streaming service. They then completed a survey that assessed their response to the ad. We hypothesized that music involvement would interact with ad appeal to affect responses to the ad. A significant interaction showed that the guilt appeal resulted in significantly greater purchase intentions than the fear appeal, but only for consumers with low music involvement. Additionally, rational and guilt appeals resulted in significantly greater positive affect and ad recall than the fear appeal. Practical implications of the results are discussed.

INTRODUCTION

According to the Recording Industry Association of America (RIAA, 2023.), the recorded music industry in the United States was worth an estimated \$15.9 billion in 2022, which was a 6% increase from the previous year. The increase occurred primarily because of continued growth in music streaming as a method of music consumption. Paid subscriptions to music streaming services increased from 84 million subscriptions in 2021 to 92 million in 2022. Revenue from paid subscriptions to music streaming services also continues to rise. In 2015, streaming service revenue was \$2.4 billion; it was \$10.1 billion in 2020 (Statista, n. d.). In 2022, revenue from music streaming was \$13.3 billion and accounted for 84% of the total music industry revenue (RIAA, 2023). Music streaming services are popular because they offer an abundance of songs at an inexpensive cost, along with music discovery tools to expose the user to artists listeners otherwise would not have encountered. They have been found to be especially popular among participants aged 19-30 (Sinclair & Green, 2016).

Physical music formats (CDs and vinyl records) and legal digital downloads continue to be an avenue for music consumption, although they have become less popular during the last decade (Thompson, 2015). Digital downloads accounted for only 3% of music industry revenue in 2022, down from a high of 43% in 2012, while physical formats contributed 11% of the 2022 revenues (Orr, 2023). Another music consumption method is illegal downloads. This method is especially popular among college students because it is a cost-free alternative to paid music streaming services (Weijters and Goedertier, 2015) or to purchasing music legally. Estimates indicate that music theft from illegal downloads and music piracy cost the sound recording and related retail industries approximately \$2.7 billion per year and have resulted in the loss of more than 71,000 jobs in the U.S. economy. Music theft also results in \$422 million in lost tax revenue (RIAA, 2023). These statistics indicate that there is a need to understand factors that influence willingness to pay for music rather than acquiring it illegally.

The purpose of this study is to examine the willingness to pay for a music streaming service among college students after being exposed to a digital advertisement. More specifically, it will consider how three different types of advertising appeals affect interest in and willingness to purchase a music service. It will also examine how a person's involvement with music influences their response to these different types of advertising appeals.

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Music Piracy

While advertising aids consumers in choosing legal methods to consume music, there are other ways to interact with music. Music piracy is a free, viable alternative to paid music streaming and downloading. Piracy includes downloading unauthorized versions of copyrighted music from a file-sharing service as well as illegally copying music using streamripping software or mobile apps. Piracy is illegal because it steals copyrighted material; offenders may face criminal or civil lawsuits (RIAA, 2016).

Research indicates that music and software piracy is widely practiced. Kwong, Yau, and Lee (2003) observed that 73.2% of their sample had bought pirated CDs in the last 12 months. Gupta, Gould, and Pola (2004) found that 42.5% of participants admitted to pirating software. In a 2008 study by Lysonski and Durvasula, 94% of participants admitted that they consumed downloaded music for which they did not pay. These studies suggest that music and software piracy are not rare occurrences.

Research also has found that there is not a negative stigma associated with software and music piracy. For example, Hinduja and Higgins (2011) reported that 49.6% of the study sample said they would not feel guilty about pirating software, and 51.3% did not regard piracy as inherently wrong. Research by Alleyne, Soleyn, and Harris (2015) supports this since they found that all of the students in their sample had favorable attitudes toward both music and software piracy. They concluded that piracy is ethically accepted among students. These beliefs have been attributed to the anti-big business attitudes of Millennials and to a lack of knowledge about the true effect of music piracy on artists (Lysonski and Durvasula, 2008; Kwong et al., 2003). Music piracy might be less likely to occur if listeners believed that pirated music was of lower quality than legally purchased music. However, the limited research examining the quality of pirated music suggests that consumers perceive pirated music to be similar in quality to legally purchased music (Gupta, Gould & Pola, 2004).

Several factors that have been found to affect an individual's tendency to pirate music. Chiou, Huang, and Lee (2005) hypothesized that an individual who idolizes a particular band or group would be less likely to pirate their music because buying music is a way to support the artist. However, this hypothesis was not supported as the authors found that idolizing a particular singer or band did not have a significant effect on their tendencies to pirate music and that people chose pirated music over monetarily supporting their favorite groups. Instead, research has found that demographic factors, ethical tendencies, and fear of persecution have a greater impact on pirating behavior than idolizing a particular singer or band.

With respect to demographic factors, several studies have concluded that young males are the most likely to pirate music or software (Kwong et al., 2003; Hinduja & Higgins, 2011). Hinduja and Higgin's (2011) survey of college students defined the most specific profile for those most likely to pirate music: Asian males of junior standing, majoring in a non-Business or Social Sciences area. Husted (2000) examined piracy demographics at a national level and found that low levels of economic wealth and high levels of income inequality were positively related to software piracy. Individualistic cultures, or countries that favor personal rights, independence, and self-reliance, also displayed greater tendencies toward software piracy (Husted, 2000).

Although research has found that music and software piracy is widely accepted, individuals still consider ethical implications when deciding whether to illegally download content. Gupta et al. (2004) found that ethical considerations were more important than legal considerations when deciding to pirate software. Similarly, Phau and Ng (2010) found that those with lower ethical standards had less remorse about piracy and also displayed greater intention to pirate software (Phau and Ng, 2010). Interestingly, Lysonski and Durvasula (2008) found a discrepancy between self-reported piracy behavior and the piracy behavior attributed to others. Specifically, they found that the majority of respondents denied that they personally would pirate, but when asked if their friends would pirate music, respondents were overwhelmingly affirmative. Finally, research has found that those who consumed pirated music in the past were more likely to keep doing so (Kwong et al., 2003; Gupta et al., 2004; d'Astouss, Colbert, and Montpetit, 2005).

A final factor that has been found to contribute to the occurrence of music piracy is the low fear of prosecution. Alleyne, Soley, and Harris (2015) found that perceived prosecution risk was the largest factor in the decision to not pirate software or music, having a stronger impact than either morality or social norms. However, since participants perceived prosecution risk to be low, the majority of the sample continued to pirate music. They also found that those who pirate music continue their behavior because they think they are immune to legal action. Hinduja and Higgins (2011) found that only half of their participants were concerned about the legal implications of piracy since they did not know any individuals who were convicted of piracy. Thus, fear of prosecution appears to only be an effective deterrent if people believe that being prosecuted is a likely outcome of pirating music.

While music piracy is a common way to consume music, there are also many legal ways to consume music. This study focused on music streaming services as an avenue of legal consumption and factors that might positively impact the willingness to pay for music through a streaming service rather than acquire the music illegally. With any service consumption choice, advertising can have a significant impact on interest in and willingness to pay for the service. Music streaming services like Pandora, Spotify, and Apple Music, for example, commonly use advertisements to persuade customers to purchase their service. This suggests that advertising has the potential to reduce music piracy if it is successful in enticing consumers to purchase music legally.

Advertising Appeals

Although there are many different types of advertising appeals that can be used to persuade consumers to purchase a product or service, among the more common appeals are rational appeals and emotional appeals. Rational appeals focus on the thinking process of the target and emphasize factual and objectively verifiable information to persuade consumers to purchase a product (Keshari and Jain, 2014; Leonidou & Leonidou, 2009). Emotional appeals target consumer needs (e.g., psychological or social needs) and attempt to arouse the feelings of the target (Leonidou & Leonidou, 2009).

A substantial body of research has examined the relative effectiveness of rational and emotional advertising appeals but has produced mixed results on which is more effective. Keshari and Jain (2014), for example, found that rational appeals elicited more favorable purchase intentions than emotional appeals. Research has also found that rational appeals promote more brand commitment (Pang, Keh & Peng, 2009), better recall (Mehta and Purvis, 2006), and more positive brand attitudes than emotional appeals (Stafford, 1996). However, some research finds no difference in the effectiveness of the two types of appeals (e.g., Zinn & Manfrado, 2000) while other studies suggest that emotional appeals may produce more positive attitudes toward both the ad and brand and lead to greater purchase intentions (e.g., Lee & Heere, 2018; Batra & Stayman, 1988; Goldberg & Gorn, 1987). A meta-analysis (Hornik, Ofir, Rachamim, 2017) comparing the effectiveness of three rational appeals (two-sided, gain-framed, and comparison) and three emotional appeals (fear, sex, and humor) found that, as a group, emotional appeals were more effective than rational appeals. The two most effective emotional appeals were sex and humor.

A number of studies have examined various moderators that might influence the effectiveness of rational and emotional ad appeals. Moderators examined include cultural setting (Hong, Muderrisoglu & Zinkhan, 1987), brand familiarity (Rhee & Jung, 2018), and type of product (Johar & Sigry, 1987; Crocker & Holmes, 1987) or service (Zhang, Sun, Liu & Knight, 2014). For example, Zhang et al. (2014) distinguished between experience services and credence services. An experience service is one that can be assessed by actually using the service (e.g., a hotel), while credence services involve trusting the opinions of an educated professional (e.g., a doctor, lawyer, or financial specialist) and, thus, are difficult to evaluate even with experience. They found that purchase intentions were more favorable when using an emotional appeal to advertise an experience service but that a rational appeal was more effective for a credence service.

Much of the research examining emotional appeals has focused on emotional appeals in general rather than examining specific types of emotional appeals. Emotional appeals can vary a great deal depending on the nature of the emotions they attempt to arouse. For example, some emotional appeals

attempt to generate positive emotions, such as joy or happiness, while others focus on negative emotions, such as fear, anger, or guilt. There are two types of emotional appeals of interest in this study: guilt and fear. Guilt appeals attempt to activate a sense of responsibility for others (Fernandes and Segev, 2016; Basil, Ridgway, and Basil, 2006) and create a state of remorse or self-blame after violating or thinking about violating an internal standard of behavior (Huhmann and Brotherton, 1997). Fear appeals threaten consumers with a potential negative outcome for behavior that is either physically harmful or socially unacceptable (Brennan and Binney, 2010). Although fear and guilt are more negative emotions, descriptive research finds that both types of appeals are used in advertisements. In an analysis of magazine ads, Huhmann and Brotherton (1997) found the guilt appeals were common, accounting for 14% of all ads. They also found that charities, health care services, and consumer nondurable goods like food and cleaning products are the highest users of guilt appeals, while public service announcements (PSAs) tend to use fear appeals at the highest rate.

Research suggests that guilt appeals can be effective in changing attitudes and behavior. Previous research has identified two types of guilt appeals: anticipatory and reactive. Anticipatory guilt occurs before a decision when a person considers violating their own standards (Coulter, Cotte, and Moore, 1999; Renner, Lindenmeier, Tscheulin, and Dreves, 2013). Reactive guilt occurs after a decision when a person has violated their own standards (Coulter et al., 1999; Renner et al., 2013). Coulter et al. (1999) found that anticipatory and reactive guilt appeals influence behavioral intention for consumer goods and services better than other types of ad appeals. Furthermore, anticipatory guilt appeals have been found to lead to more charitable donations than reactive guilt appeals (Renner et al., 2013).

Many studies have explored the use of guilt appeals in prosocial ads and PSAs. Basil, Ridgway, and Basil (2006), for example, confirmed that guilt appeals enhance donation intentions. Empathy, or a feeling of connectedness, can be used to enhance guilt appeals in prosocial ads (Basil et al., 2006). Boudwins, Turner, and Paquin (2013) found that guilt appeals, which produced feelings of responsibility for others, were more effective in ads about STDs than shame appeals, which produced feelings of anger. Additionally, Coulter and Pinto (1995) found that appeals that arouse a moderate level of guilt resulted in higher purchase intentions than those that aroused either high or low levels of guilt. Several factors have been found to moderate the effectiveness of guilt appeals, including environmental consciousness, sponsor motive, and message acceptance (Chang, 2012; Turner, Mabry-Flynn, Shen, Jiang, Boudewyns, and Payne, 2018). Additionally, the more trustworthy the viewer finds the source, the more likely the viewer is to act on the message in the guilt appeal (Pounders, Lee, and Royne, 2018).

Reviews of the fear appeal literature (e.g., Higbee, 1969; Ray & Wilkie, 1970; Boster & Mongeau, 1984; Witte & Allen, 2000; Tannenbaum, Hepler, Zimmerman, Saul, Jacobs, Wilson & Albarracin, 2015) conclude that fear appeals also can be effective in bringing about attitude change. The meta-analysis conducted by Tannenbaum et al. (2015) concluded that there were very few circumstances where fear appeals were not effective in changing attitudes, intentions, and behavior and that, contrary to frequently expressed concerns, there were no situations where they produced negative outcomes. They also examined several moderators derived from common theories about how fear appeals work and found that fear appeal messages are more effective when respondents perceived themselves as highly susceptible to the threat in the message, when the threat has high severity, and when the message includes efficacy statements (i.e., statements indicating that the recommended action will be successful in averting the threat and that only a one-time action is required). Additionally, they found that fear appeals were more effective when the target group included more females.

Research comparing fear and guilt appeals has found that guilt elicits empathetic emotions and is generally a more effective appeal than fear (Bennett, 1998; Brennan & Binney, 2010; Burnett & Lunsford, 1994; Coulter & Pinto, 1995; Edell & Burke, 1987; Geuens, De Pelsmacker, & Pham (2014); Son, Lee, Hong, & Drumwright, 2016). Brennan and Binney (2010) found that guilt appeals in social marketing campaigns aroused participants' sympathy and a moral obligation to others, while fear appeals invoked an inclination toward self-protection.

Hypotheses

The purpose of this study was to compare the effectiveness of rational, fear, and guilt appeals in persuading consumers to purchase a music streaming service. Several factors differentiate this study from previous research. First, this study looked at the effectiveness of rational, guilt, and fear appeals in the context of preventing music piracy, which prior research has not examined. Second, this study directly compares rational appeals with guilt and fear appeals, whereas the majority of previous research has only compared rational appeals with emotional appeals in general rather than with a specific type of emotional appeal. Finally, this study examined the impact of consumer involvement with music on the relative effectiveness of these three types of appeals.

A substantial amount of research in marketing has established consumer involvement as an important factor influencing how consumers respond to advertisements (e.g., Petty, Cacioppo, 1979; Zaichkowsky, 1985; Vera & Espinosa, 2019; Bart, Stephen & Savary, 2014; Kerr, Schultz, Kitchen, Mulhern, & Beede, 2015; Wu, Lu & Chen, 2017). Consumer involvement refers to the amount of personal relevance the product and/or message has to the consumer (Petty & Cacioppo, 1981). Petty and Cacioppo (Petty & Cacioppo, 1981; Petty, Cacioppo & Schumann, 1983); Petty, Cacioppo & Goldman; 1981) have argued that involvement influences the way consumers process information in a persuasive communication. They argue that persuasion can occur through two different routes – the central route and the peripheral route. In the central route, the target focuses on objective and factual information that allows them to determine the merits of the position. In the peripheral route, the target is persuaded because the attitude object is associated with positive or negative cues or is persuaded by other types of cues in the communication (e.g., source characteristics, music, colors). They hypothesized and found that consumers who have high involvement with the product process information via central processing while consumers with low involvement use the peripheral route to persuasion.

Very little research has examined the role of involvement in the context of purchasing music-related products. Weijters and Goedertier (2015) define music involvement as the degree to which individuals perceive, consume, and interact with music in their daily lives. Those highly involved with music care about the industry as a whole, remain updated with their favorite artists and prioritize listening to and discovering new artists. They also care about the methods they use to consume their music and value platforms with music discovery aids, large libraries, and playlist creation tools. Those who are not involved with music do not think about or listen to music very often. They may have a favorite artist but are not concerned with discovering new artists. The limited research that has examined the impact of involvement with music has found that it did not affect the likelihood of engaging in online word-of-mouth about music-related products (Sun, Youn, Wu, and Kuntaraporn, 2005) but was positively related to preference for tangible music formats (CDs, LPs) (Styven, 2010).

We argue that involvement with music may influence the effectiveness of rational, guilt, and fear appeals in persuading people to purchase a music streaming service. Following Petty and Cacioppo, we suggest that people who have high involvement with music will be more persuaded by a rational appeal, which provides objective, factual information about the merits of the product, because this corresponds to the central route to persuasion. In contrast, people with low involvement will be more persuaded by either the fear appeal or the guilt appeal because these appeals use the peripheral route to persuasion. Both of these types of appeals associate negative cues (either the potential for harm to self in the fear appeal and the potential for harm to others in the guilt appeal) with failure to purchase the streaming service. Therefore, we hypothesize that:

H1a: People who are highly involved with music will have greater ad recall and greater interest in, likelihood of recommending, and intent to purchase a music streaming service when exposed to an ad using a rational appeal than to a fear or guilt appeal ad.

H1b: People who have low music involvement will have greater ad recall and greater interest in, likelihood of recommending, and intent to purchase a music streaming service when exposed to a fear or guilt appeal ad than to a rational appeal ad.

H2a: People who are highly involved with music will have greater positive affect toward the ad and less negative affect toward the ad when exposed to an ad using a rational appeal than when exposed to a fear or guilt appeal ad.

H2b: People who have low music involvement will have greater positive affect toward the ad and less negative affect toward the ad when exposed to a fear or guilt appeal ad than when exposed to a rational appeal ad.

METHOD

Participants

One hundred and sixty-five college students between the ages of 18 and 24 participated in this study. The sample included 24 males and 141 females¹. Students were approximately evenly distributed across the six academic units at the university. This is an appropriate sample for the study because college students are frequent consumers of music and acquire it in various ways. They are also especially likely to use illegal methods of consuming music. Thus, understanding factors that might influence their willingness to pay for a music streaming service is important in helping to combat the problem of music piracy.

Procedure

The survey was created in Qualtrics. There were six blocks, or sections, in the survey: the confidentiality statement, demographic questions, frequency of listening methods, music involvement, the advertising appeal, and the dependent variable measures. The survey took between 15 and 20 minutes to complete.

Approval from the Institutional Review Board (IRB) was obtained prior to distributing the survey. The survey was sent to participants via email so they could complete it on their own time in their own environment. Participants were invited to complete the survey through a variety of methods. A post was made on Facebook, inviting immediate acquaintances to participate in the survey. A link to the survey was also sent to members of various campus organizations, inviting their participation. Finally, students in two sections of a class were given an opportunity to participate in the survey. They provided their emails in class and were asked to complete the survey on their own time. Respondents agreed to a consent statement that outlined the purpose of the study and detailed the rights of the participant before answering any survey questions.

Independent Variable Manipulation

We had one manipulated independent variable in the study: type of advertising appeal. Three different types of appeals were compared: a rational appeal, a fear appeal, and a guilt appeal. The type of appeal was manipulated within three separate web banner advertisements for a mock music streaming service. The name, logo, and branding of the music streaming service were fabricated in order to ensure that participants had no preconceived opinions or emotions connected to an existing service. The three ads were identical in size, shape, color, and branding; the only difference between them was in the information provided about the service. The ads were designed with minimalism and a pink/purple monochromatic color scheme to make it more likely that participants would focus on the content of the ad. Additionally, this minimized the possibility that participants would be offended by the ad itself or choose not to purchase the streaming service because they did not like the design or branding of the ad. The photo in the ad depicted a man listening to music through headphones; this is a universal image associated with music streaming, further minimizing the risk of participants taking offense to the brand. The ads were Photoshopped onto a Facebook newsfeed advertisement to give participants the illusion that they were viewing the advertisements in a web browser. The Facebook page was cropped so that

¹ Fourteen cases were excluded from analyses because of missing data on one or more of the dependent variables.

only the advertisement was in view; participants could not see any other posts or ads on the page. The streaming service was called *Tonal* and used a triangular play button as the primary logo.

Participants were randomly assigned to one of the three advertising appeal conditions through Qualtrics. The rational appeal ad described the advantages of the music service, such as artist discovery tools, accessible music libraries, and pre-made playlists ("Tonal is the newest music streaming service with over 2 million artists, and 50 new artists added every week. There are new songs released every day, compiled into playlists based on your streaming history"). The fear appeal ad focused on the consequences of music piracy, urging the viewer to buy the streaming service instead of getting convicted of a crime ("Is that illegal download free? It could cost you \$250,000 and jail time. A subscription to Tonal is only \$4.99 a month and is a safer alternative to music piracy"). The guilt appeal ad addressed the consequences the streaming service has on the music industry itself ("Your next favorite artist could be struggling to make it. Tonal reimburses artists better than any streaming service to support up-and-coming musician"). Participants were informed about the price of the service in all three ads.

Measures

Interest in the Music Service. A scale containing four items was developed in order to measure how much interest participants had in the advertised streaming service. Items were measured using 7-point Likert scales with 1 being "strongly disagree" and 7 being "strongly agree." Sample items included: "I would visit the website for this ad" and "I am interested in learning more about this service." The coefficient alpha reliability for this scale was 0.88.

Likelihood of Recommending the Music Service. A scale containing three items was developed in order to measure how likely it was that participants would recommend the advertised streaming service. Items were measured using 7-point Likert scales, with 1 being "strongly disagree" and 7 being "strongly agree." Items included: "I would suggest that my friends investigate more into the service" and "I would recommend this service to a friend." The coefficient alpha reliability for this scale was 0.91.

Purchase Intention. A scale containing a single item was developed in order to measure how likely it was that participants would purchase the advertised streaming service. The item was measured using a 10-point scale, with 0 being "No chance, almost no chance (1 in 100)" and 10 being "certain, practically certain (99 chances in 100)".

Positive Affect. A scale containing two items was developed in order to measure participants' positive emotional reaction to the advertisement. Items were measured using 7-point Likert scales, with 1 being "strongly disagree" and 7 being "strongly agree." A sample question was, "This ad makes me feel happy." The coefficient alpha reliability for positive affect was 0.79.

Negative Affect. A scale containing six items was developed in order to measure participants' negative emotional reaction to the advertisement. Items were measured using 7-point Likert scales, with 1 being "strongly disagree" and 7 being "strongly agree." A sample question is, "This ad makes me feel anxious." The coefficient alpha reliability for the negative affect scale was 0.88.

Ad Recall. Three questions were included at the end of the survey that measured a participant's ability to remember factual information about the advertisement they saw. The items were measured using multiple-choice questions; respondents were awarded one point for every question they answered correctly. A sample question was: "What was the name of the service in the ad?"

Music Involvement. Involvement with music was measured using the music absorption scale developed by Ridgeway (1976). Participants were asked to rate their music absorption when listening to music on a scale from 0% to 100%, with 0% meaning that the person's attention is completely elsewhere while listening to music and 100% meaning that when listening to music, all of the person's focus is on the music and the lyrics.

RESULTS

Table 1 presents the means and standard deviations for the study variables as well as the correlations between the study variables.

Manipulation Check

To ensure that respondents interpreted the rational, fear, and guilt appeals as they were designed, a question in the survey was included as a manipulation check. The question asked, "What does this ad describe?" There was a multiple-choice response that corresponded with each type of ad appeal. The response related to the rational appeal was that the ad described "the features and benefits of the service." The response related to the guilt appeal was that the ad described "supporting up-and-coming artists." The response related to the fear appeal described "the dangers associated with music piracy." There was also a fourth response that did not correspond to any of the three appeals. Overall, 70% of participants selected the response that matched the appeal they were exposed to. Specifically, 68% of the people in the rational appeal condition said the ad was about the features and benefits of the service; 74% of the people in the guilt condition said the ad was about supporting up-and-coming artists; and 68.4% of the people in the fear condition said the ad was about the dangers associated with music piracy. These results suggest that the manipulation of the appeal type was successful.

Hypotheses

Data were analyzed using 3 x 3 ANOVAs with ad appeal (rational, fear, guilt) and music involvement (low, medium, high) as independent variables. Although music involvement was measured on a continuous scale, for the purpose of analysis, it was changed into a categorical variable with respondents falling into low, medium, or high levels of involvement. We predicted that those with high music involvement would respond more favorably to the rational appeal ad than to either the fear appeal or the guilt appeal, while those with low music involvement would respond more favorably to the fear and guilt appeals than to the rational appeals. Six dependent variables representing various responses to the ad were assessed: (1) ad recall; (2) interest in the music service; (3) likelihood of recommending the service; (4) purchase intention; (5) positive affective response to the ad; and (6) negative affective response to the ad. Support for the hypotheses would be shown by a significant interaction between ad appeal and music involvement. When the interaction was significant, we followed up with simple effects tests comparing the three types of ad appeals within each level of music involvement and then conducted protected post hoc comparisons to determine which types of ad appeal were significantly different from each other. The relevant results from these analyses, including the effect sizes for the significant effects, are presented in Table 2 and described below.

We found a significant interaction between ad appeal and music involvement for purchase intentions but not for any of the other dependent variables. Although this interaction was significant for purchase intentions, it was generally not in the direction hypothesized. Figure 1 depicts this interaction. Simple effects tests comparing the ad appeals at each level of music involvement revealed a significant effect only among those with low music involvement. We expected that purchase intentions would be similar for the fear and guilt appeal among low-involvement consumers and that both would be higher than purchase intentions for the rational appeal. Comparing the purchase intention means for the three types of ad appeals for those with low music involvement, we found, contrary to our hypothesis, that the purchase intentions of those exposed to the guilt appeal ($\bar{x} = 4.17$) were significantly higher than for those exposed to the fear appeal ($\bar{x} = 2.15$, $p = .005$). However, as predicted, we found somewhat higher purchase intentions for those exposed to the guilt appeal than to the rational appeal ($\bar{x} = 2.91$, $p = .09$). The purchase intentions of those exposed to the rational appeal did not differ significantly from those exposed to the fear appeal ($p = .302$). Also, contrary to our hypothesis, we did not find any ad appeal differences in the purchase intentions of those with high (or medium) music involvement.

Although the hypothesized interaction was not significant for any of the other dependent variables, we did observe a significant ad appeal main effect for negative affect, positive affect, purchase intention, and ad recall. Protected post hoc comparisons showed that the rational appeal ($\bar{x} = 2.34$)

produced significantly less negative affect than both the fear appeal ($\bar{x} = 2.9$; $p = .027$) and the guilt appeal ($\bar{x} = 2.92$; $p = .029$). Additionally, the rational appeal ($\bar{x} = 3.8$) and the guilt appeal ($\bar{x} = 3.89$) did not differ in terms of positive affect, but both resulted in significantly greater positive affect than the fear appeal ($\bar{x} = 3.09$; $p = .005$ and $p = .013$, respectively). Finally, ad recall for the guilt appeal ($\bar{x} = 2.57$) and the rational appeal ($\bar{x} = 2.59$) did not differ from each other, but both were significantly higher than recall for the fear appeal ($\bar{x} = 2.24$; $p = .038$ and $p = .02$, respectively). Although the main effect was statistically significant for purchase intentions, post hoc comparisons showed that none of the ad appeals differed significantly from each other.

Additional Findings

In addition to the other variables measured, we also included a measure of price consciousness in the survey because we thought price consciousness might impact respondents' purchase intentions. To examine this possibility, we did a 3 x 3 analysis of variance with ad appeal (rational, fear, guilt) and level of price consciousness (low, medium, high) as the independent variables and purchase intentions as the dependent variable. The relevant results from this analysis, including the effect sizes for the significant effects, are presented in Table 3 and described below.

Results revealed a significant interaction between price consciousness and ad appeal for purchase intentions. Figure 2 depicts this interaction. To follow up on the significant interaction, we conducted simple effects tests comparing the three types of ad appeals within each level of price consciousness and then did protected post hoc comparisons when the simple effects test was significant. The simple effects test was significant for those with medium price consciousness but not those with high or low price consciousness. Post hoc comparisons showed that purchase intentions for those with medium price consciousness were significantly higher when they were exposed to the guilt appeal ($\bar{x} = 3.82$) than to the fear appeal ($\bar{x} = 2.2$; $p = .004$) or the rational appeal ($\bar{x} = 2.31$; $p = .019$). The purchase intentions of those exposed to the rational appeal did not differ significantly from those exposed to the fear appeal ($p = .87$).

DISCUSSION

The purpose of this study was to examine the impact of three different types of advertising appeals (rational, fear, and guilt) on willingness to purchase a music streaming service. We were particularly interested in whether involvement with music would interact with type of ad appeal to impact responses to the ad. Following previous research by Petty and Cacioppo (e.g., Petty and Cacioppo, 1981; Petty, Cacioppo & Schumann, 1983), we hypothesized that people with a high level of involvement with music would have more favorable responses to the rational appeal ad than to either the fear or the guilt appeal ads because the rational appeal involves central route persuasion which is more likely to be used by high involvement consumers. In contrast, we expected low-involvement consumers to respond more favorably to both of the two emotional appeals (fear and guilt) than to the rational appeal because emotional appeals rely on the peripheral route to persuasion, which is more likely to be used by low-involvement consumers (Petty & Cacioppo, 1981; Petty, Cacioppo & Schumann, 1983).

We found limited support for our hypotheses involving the interaction between ad appeal and music involvement. The interaction was only significant for purchase intentions and then generally not in the direction that we hypothesized. We found differences in purchase intentions for the three types of ad appeals only among those with low music involvement. Consistent with our expectations, the guilt appeal resulted in somewhat greater purchase intentions than the rational appeal for low-involvement consumers; however, it also resulted in significantly greater purchase intentions than the fear appeal, while we expected that low-involvement consumers would respond similarly to the fear and guilt appeals. Additionally, we expected high-involvement consumers would respond more favorably to the rational appeal than to either fear appeal or guilt appeal but instead found that they also responded more favorably to the guilt appeal than to either the rational appeal or the fear appeal, although the effect was not statistically significant.

It is possible the greater effectiveness of the guilt appeal with both low involvement and, to a lesser degree, high involvement consumers could have occurred because each experienced a different type of guilt. Prior research (e.g., Boudwins et al., 2013) suggests that guilt can be either externally or internally focused. Externally focused guilt induces a feeling of personal responsibility and empathy for others, which, in this case, would be the music industry as a whole and/or struggling new artists. In contrast, internally focused guilt relies more on generating feelings of shame because one has violated (or has thought about violating) a personal standard of behavior (e.g., being honest, helping others). One might speculate that those who are not very involved with music would be less susceptible to guilt based on the potential to harm the music industry or the success of specific artists. Instead, the guilt low musically involved participants experienced might be more internally focused, as the guilt appeal made them think about occasions when they had acquired music illegally (or had contemplated doing so) and, thus, violated a personal standard. In contrast, the guilt experienced by high musically involved consumers could have been more externally focused, resulting from feelings of empathy toward struggling new artists and a sense of responsibility for the music industry overall. Experiencing either type of guilt might then have resulted in the greater purchase intentions we observed for these two groups of consumers. Thus, although the guilt appeal appeared to result in greater purchase intentions for both low and high-musically involved respondents, it is possible that the nature of the guilt they experienced could have been different.

It is noteworthy that we found a similar pattern of results with respect to the guilt appeal for interest in the service, the likelihood of recommending the service, and positive affective response – although the effects were not statistically significant. In particular, we found that the guilt appeal resulted in greater positive affect, greater interest in the service, and greater likelihood of recommending the service for both low and high-musically involved consumers than for those with medium involvement. It is not clear why guilt was less effective for those having a medium level of involvement, but the consistent pattern of results suggests that it should be examined further in future research.

Overall, our findings do not support the impact of consumer involvement found by Petty and Cacioppo (Petty and Cacioppo, 1981; Petty, Cacioppo & Goldman, 1981; Petty, Cacioppo & Schumann, 1983). Our results may have differed from those of Petty and Cacioppo because the involvement construct we measured was not focused explicitly on the personal relevance of music to participants but rather on how much the participant is absorbed in music when they listen to it. We assumed that those who are more absorbed in the music when they listen to it would also view music as having high personal relevance to them, but perhaps this was not the case. Future research using a measure of music involvement that focuses explicitly on the personal relevance and importance of music to the respondent might provide a better test of the findings of Petty, Cacioppo, and Schumann (1983) regarding the impact of music involvement on purchases for music-related products and services.

Although music involvement in combination with type of ad appeal had limited impact on responses to the ads, we found that the various ad appeals by themselves elicited different reactions from consumers. In particular, the guilt and fear appeals both produced significantly greater negative affect than the rational appeal. The guilt and rational appeals both resulted in significantly greater positive affect and ad recall than the fear appeal. Finally, purchase intentions tended to be greater for the guilt appeal than the rational and fear appeals. It is interesting that the guilt appeal produced a positive affective response to the ad that was as high as the rational appeal but a negative affective response to the ad that was as high as the fear appeal. This suggests some ambivalence toward the guilt appeal. Despite this ambivalence (or perhaps because of it), ad recall was greater with the guilt appeal than the fear appeal, and purchase intentions tended to be greater as well.

Based on the results from this study, it appears that both the rational appeal and the guilt appeal can produce favorable reactions from consumers when advertising a music streaming service, but they may have different strengths. The rational appeal produced a more uniformly favorable emotional response to the ad, while the guilt appeal tended to result in more positive behavioral responses to the ad (in terms of ad recall and purchase intentions), although, as noted earlier, the guilt appeal seems to be more effective with consumers who have either low or high music involvement than with those who have medium involvement. The generally positive responses we found for the guilt appeal may have occurred

because our manipulation created conditions that prior research has found will maximize the effectiveness of the guilt appeal. In particular, our manipulation attempted to induce feelings of empathy and responsibility for others, which has been found to enhance the effectiveness of the guilt appeal (Basil et al., 2006; Boudwins et al., 2013). Additionally, our manipulation likely created a moderate level of guilt, which has been found to be more effective than either a high or low level of guilt (Coulter & Pinto, 1995). Somewhat surprisingly, the rational appeal was less effective than the guilt appeal in creating the intent to purchase the music service. It is possible that the rational appeal produced lower purchase intentions than the guilt appeal in this study because respondents view all music streaming services as being basically the same in terms of features. If this is the case, the objective and factual information provided in the rational appeal would likely be less persuasive, which made it possible for the more emotionally focused information in the guilt appeal to impact purchase intentions to a greater degree. Further research directly comparing guilt and rational appeals would be helpful to better understand how they might affect responses to an ad for a music streaming service as well as other products or services.

Our results also suggest that the fear appeal may be the least effective of the three appeals that we examined since it resulted in more consistently negative responses than either of the other two appeals. The more negative emotional response to the ad that occurred for the fear appeal is consistent with the meta-analysis results of Hornik et al. (2017), who found that the fear appeal was among the lowest ad appeals in terms of generating positive attitudes toward the product/brand and toward the ad. The lower ad recall that occurred for the fear appeal might be due to the tendency for fear appeals to invoke concerns about self-preservation (Brennan & Binney, 2010). Respondents may have been more focused on the punishment described in the fear appeal and, thus, stopped paying attention to key facts about the service itself. Finally, the fear appeal may have resulted in lower purchase intentions in this context because consumers did not think the punishment described in the ad (getting fined or jail time) was very likely to occur. Prior research on music piracy has found that prosecution risk is an ineffective deterrent because consumers perceive the likelihood of actually being prosecuted as being very low (Alleyne et al., 2015; Hinduja & Higgins, 2011), which negatively impacts the effectiveness of fear appeals (Tannenbaum et al., 2015).

Another interesting finding from this research related to the impact of price consciousness on responses to the ad. We included a measure of price consciousness because an individual's spending habits might affect their willingness to pay for a music service, especially when music can be consumed for free fairly easily. Although price consciousness did not, by itself, affect any of the dependent variables, it did interact with type of ad appeal to influence purchase intentions. Results showed that medium price-conscious respondents had greater purchase intentions when exposed to the guilt appeal compared to either the fear or rational appeal; in contrast, high price-conscious respondents tended to have greater purchase intentions when exposed to the rational appeal than either the fear or guilt appeal (although the differences were not statistically significant). The rational appeal might have been somewhat more effective with high price-conscious respondents because these consumers want to know exactly what benefits they will receive when they purchase a product or service. In contrast, the purchase intentions of respondents having medium price consciousness (and, to a lesser degree, low price consciousness) may have been more influenced by the guilt appeal, perhaps because their purchases are based more on emotional factors. Also, consumers who are not highly price-conscious would probably be less inclined to do a cost-benefit analysis because they are not as concerned with getting a favorable return on their investment. Consequently, the information in the rational appeal would be less persuasive to them.

Practical Implications

There are several implications from this study for those involved in the marketing of music services. This study aids music marketers in deciding which type of advertising appeal to use in promoting their music service. Overall, our results suggest that a guilt appeal that evokes feelings of empathy toward struggling artists may be the most effective ad appeal to use in encouraging consumers to purchase a music streaming service. A guilt appeal of this nature may not only evoke positive feelings toward the ad; it may enhance ad recall and purchase intentions. This study also suggests that the level of music involvement could be a factor influencing the effectiveness of the guilt appeal. Music marketers might consider using specialized advertising targeted toward consumers with different levels of music

involvement. Music involvement could be used to segment the population, allowing for the use of different appeals depending on the level of involvement. Facebook and Instagram especially allow advertisers to target specific demographics of people. Additionally, advertisements for a music streaming service in magazines or on websites targeted toward musicians and others who love music might benefit from using a guilt appeal. Finally, the results of this research suggest that music marketers should be wary of using fear appeals based on the possibility of getting caught for music piracy. Not only did the fear appeal result in less recall of factual information in the ad than the rational and guilt appeal, but it also resulted in less positive affect, greater negative affect, and lower purchase intentions.

Limitations

There are several reasons why the findings from this study should be viewed with some caution. This study was a lab study, so our results may not generalize to real purchase decisions for a music streaming service. Respondent reactions might be different if they encountered the advertisement while scrolling through their personal Facebook page in a real environment. Since the music service ad was the only element on the page, respondents were forced to read it. On their real Facebook pages, respondents may pay less attention to ads or scroll right past them. Second, there were only twenty-four males who responded to this survey, which makes it difficult to generalize the results to males. Women are stereotypically attributed with higher levels of empathy, so that could be why the guilt appeal was successful in this study. Finally, we did not collect information about the respondents' previous ownership of a comparable music streaming service, so it was not possible to determine if this affected responses to the fictitious service. If respondents already had a comparable service, an advertisement for a competing service may not have been as effective.

Suggestions for Future Research

There are many opportunities for future research based on the results of this study. Future research might examine the impact of different types of advertising appeals in the context of similar services provided in other entertainment industries, such as movie and TV streaming services (like Netflix and Hulu) or video games. Additionally, future research should look at the impact of the degree of involvement in these industries and whether this influences the effectiveness of different types of advertising appeals for purchases of these services. Given the results of this study, it is possible that guilt appeals will generate positive emotions and produce greater purchase intentions than rational or fear appeals. It would also be interesting to examine the impact of various combinations of advertising appeals. This study segmented each appeal, but it is possible that a combination of rational and guilt appeals may be most effective in terms of both positive affect and purchase intention. Future research could examine this possibility.

Further research examining the involvement construct in the context of music would be helpful as well. The common understanding of involvement relates to the personal relevance of the product, service, or issue to the consumer. In this study, our measure of involvement focused on absorption while listening to music. Pucely, Mizerski & Perrew (1988) suggested that the involvement construct might need to be conceptualized differently for aesthetic products, such as music, compared to traditional tangible products. They proposed that a measure of music involvement should include not only a measure of the importance of music to the person (similar to the traditional view of involvement) but also a behavioral component (e.g., time spent listening to music) and experiential component (similar to the absorption measure used in this study). Research further examining and comparing these different aspects of involvement in the context of music would provide a better understanding of the music involvement construct. It would also allow a better assessment of the impact of music involvement on responses to ads for music-related products and its impact on purchase decisions.

This study looked at three different types of advertising appeals and how they affect a respondent's willingness to pay for a music streaming service. This research is meant to help address an important issue in the music industry: preventing music piracy. This study helps marketers of music products to understand what types of ad appeals have the greatest likelihood of persuading consumers to purchase music legally. Our results suggest that guilt appeals have viability in the market at two extremes:

when people are not involved in the music industry and when people consider music a highly important part of their lives. This study aids music marketers in deciding which type of advertising appeal to use across different target markets in the industry, helping them to better reach their audience and further the use of paid music services. Ultimately, this will reduce music piracy and help the music industry achieve greater success.

References

- Allelyne, P., Soleyn, S. C., & Harris, T. (2015). Predicting Accounting Students' Intentions to Engage in Software and Music Piracy. *Journal of Academic Ethics*, (13, no. 4), pp. 291-309.
- Bart, Y. S., Stephen, A. T. and Sarvary, M. (2014). Which products are best suited to mobile advertising? A field study of mobile display advertising effects on consumer attitudes and intentions. *Journal of Marketing Research*, 51(3), 270-285.
- Basil, D. Z., Ridgway, N. M., Basil, M. D. (2006). Guilt appeals: The mediating effect of responsibility. *Psychology and Marketing*, 23(12), 1035-1054.
- Batra, R. and Stayman, D. M. (1988). The role of mood in advertising effectiveness. *Journal of Consumer Research*, 17(2), 203-214.
- Boudewyns, V., Turner, M. M, and Paquin, R. S. (2013). Shame-free guilt appeals: Testing the emotional and cognitive effects of shame and guilt appeals. *Psychology and Marketing*, 30(9), 811-825.
- Boster, F. J. and Mongeau, P. (1984). Fear-arousing persuasive message. In Bostrom, R. N. and Westley, B. H. (Eds.): *Communication Yearbook 8*. Beverly Hills, CA, Sage, 330-375.
- Brennan, L., & Binney, W. (2010). Fear, guilt and shame appeals in social marketing. *Journal of Business Research*, 63(2), 140-146.
- Burnett M.S., & Lunsford D.A. (1994). Conceptualizing guilt in the consumer decision-making process. *Journal of Consumer Marketing*, 11 (3), 33-43.
- Chang, C. (2012). Are guilt appeals a panacea in green advertising? The right formula of issue proximity and environmental consciousness. *International Journal of Advertising*, 31(4), 741-771.
- Chiou, J., Huang, C., & Lee, H. (2005). The antecedents of music piracy attitudes and intentions. *Journal of Business Ethics*, 57(2), 161-174.
- Coulter R.H., & Pinto, M. (1995). Guilt appeals in advertising: What are their effects? *Journal of Applied Psychology*, 80 (6), 697-705.
- Coutler, R. H., Cotte, J. and Moore, M. L. (1999). Believe it or not: Persuasion, manipulation, and credibility of guilt appeals. *Advances in Consumer Research*, 26, 288-294.
- D'Astous, A., Colbert, F., and Montpetit, D. (2005). Music piracy on the web – how effective are anti-piracy arguments? Evidence from the theory of planned behavior. *Journal of Consumer Policy*, 28, 289-310.
- Edell, J. A., & Burke, M. C. (1987). The power of feelings in understanding advertising effects. *Journal of Consumer Research*, 14(3), 421.
- Fernandes, J. and Segev, S. (2016). Exploring the mechanism of guilt appeals: The influence of point of reference on guilt advertising effectiveness. *American Academy of Advertising Conference Proceedings*, p. 133.
- Go-Gulf. (2014, November 30). Online piracy in numbers: Facts and statistics [Infographic]. Retrieved November 27, 2016, from <http://www.go-gulf.com/blog/online-piracy/>
- Geuens, M., De Pelsmacker, P., & Pham, M. T. (2014). Do pleasant emotional ads make consumers like your brand more? *GfK Marketing Intelligence Review*, 6(1), 40-45.

- Goldberg, M. E. and Gorn, G. J. (1987). Happy and sad TV programs: How they affect reactions to commercials. *Journal of Consumer Research*, 14(3), 387-403.
- Gupta, P. B., Gould, S. J., & Pola, B. (2004). To pirate or not to pirate? A comparative study of the ethical versus other influences on the consumer's software acquisition-mode decision. *Journal of Business Ethics*, 55(3), 255-274.
- Higbee, K. L. (1969). Fifteen years of fear arousal research on threat appeals: 1953-1968. *Psychological Bulletin*, 72(6), 426-444.
- Hinduja, S., & Higgins, G. E. (2011). Trends and patterns among music pirates. *Deviant Behavior*, 32(7), 563-588.
- Holmes, J. H. and Crocker, K.E. (1987). Predispositions and the comparative effectiveness of rational, emotional and discrepant appeals for both high involvement and low involvement products. *Journal of the Academy of Marketing Science*, 15(1), 27-35.
- Hong, J. W., Muderrisoglu, A. and Zinkhan, G. M. (1987). Cultural differences in advertising expression: A comparative content analysis of Japanese and U.S. magazine advertising. *Journal of Advertising*, 16(1), 55-68.
- Hornik, J., Ofir, C. and Rachamim, M. (2017). Advertising appeals, moderators and impact on persuasion: A quantitative assessment creates a hierarchy of appeals. *Journal of Advertising Research*, September, 305-318.
- Huhmann, B.A , & Brotherton, T.P. (1997). A content analysis of guilt appeals in popular magazine advertisements. *Journal of Advertising*, 26 (2), 35-46.
- Husted, B. (2000). The impact of national culture on software piracy. *Journal of Business Ethics*, 26(3), 197-211.
- Johar, J. S. and Sirgy, M. J. (1991). Value expressive versus utilitarian advertising appeals: When and why to use each appeal. *Journal of Advertising*, 20(3), 23-33.
- Kerr, G., Schultz, D. E., Kitchen, P. J., Mulhern, F. J. and Beede, P. (2015). Does traditional advertising theory apply to the digital world? A replication analysis questions the relevance of the elaboration likelihood model. *Journal of Advertising Research*, 55(4), 390-400.
- Keshari, P., & Jain, S. (2014). Consumer response to advertising appeals: A gender based study. *Journal of Marketing & Communication*, 9(3), 37-43.
- Kwong, K.K., Yau, O.H.M., & Lee, J.S.Y. (2003). The effects of attitudinal and demographic factors on intention to buy pirated CDs: The case of Chinese consumers. *Journal of Business Ethics*, 47(3): 223-235.
- Lee, S. and Heere, B. (2018). Exploring the relative effectiveness of emotional, rational or combination advertising appeals on sport consumer behavior. *Sport Marketing Quarterly*, 27, 82-92.
- Leonidou, L. C. and Leonidou, C. N. (2009). Rational vs. emotional appeals in newspaper advertising: Copy, art and layout differences. *Journal of Promotion Management*, 15, 522-546.
- Lysonski, S., & Durvasula, S. (2008). Digital piracy of MP3s: Consumer and ethical predispositions. *The Journal of Consumer Marketing*, 25(3), 167-178.
- Mehta, A., & Purvis, S. C. (2006). Reconsidering recall and emotion in advertising. *Journal of Advertising Research*, 46(1), 49-56.
- Orr, A. (2023). Streaming accounted for 84% of the music industry revenue in 2022. Retrieved May 11, 2023 from <https://appleinsider.com/articles/23/03/09/streaming-accounted-for-84-of-the-music-industrys-revenue-in-2022>
- Pang, J., Keh, H. T., & Peng, S. (2009). Effects of advertising strategy on consumer-brand relationships: A brand love perspective. *Frontiers of Business Research in China*, 3(4), 599-620.

- Petty, R. E. and Cacioppo, J. T. (1979). Issue involvement can increase or decrease persuasion by enhancing message-relevant cognitive response. *Journal of Personality and Social Psychology*, 37(10), 1915-1976.
- Petty, R. E. and Cacioppo, J. T. (1981). Issue involvement as a moderator of the effects on attitude of advertising content and context. *Advances in Consumer Research*, 8, 20-24.
- Petty, R. E., Cacioppo, J. T. and Goldman, R. (1981). Personal involvement as a determinant of argument-based persuasion. *Journal of Personality and Social Psychology*, 41(5), 847-855.
- Petty, R. E., Cacioppo, J. T. and Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research*, 10 (September), 135-146.
- Phau, I. & Ng, J. (2010). Predictors of usage intentions of pirated software. *Journal of Business Ethics*, 94(1), 23-37.
- Pounders, K., Lee, S. and Royne, M. (2018). The effectiveness of guilt and shame ad appeals in social marketing: The role of regulatory focus. *Journal of Current Issues and Research in Advertising*, 39(1), 37-71.
- Pucely, M. J., Mizerski, R. and Perrewe, P. (1988). A comparison of involvement measures for the purchase and consumption of music. *Advances in Consumer Research*, 15, 37-42.
- Ray, M. L. and Wilkie, W. L. (1970). The potential of an appeal neglected by marketing. *Journal of Marketing*, 34, 54-62.
- Renner, S., Lindenmeier, J., Tscheulin, D.K., and Drevs, F. (2013). Guilt appeals and prosocial behavior: An experimental analysis of the effects of anticipatory versus reactive guilt appeals on the effectiveness of blood donor appeals. *Journal of Nonprofit and Public Sector Marketing*, 25, 237-255.
- Rhee, E. S. & Jung, W. S. (2019) Brand familiarity as a moderating factor in the ad and brand attitude relationship and advertising appeals. *Journal of Marketing Communications*, 25(6), 571-585.
- RIAA (March 9, 2023). Year-end 2022 music industry revenue report. Retrieved May 11, 2023 from <https://www.riaa.com/2022-year-end-music-industry-revenue-report-riaa/>
- RIAA (n.d.). The true cost of sound recording piracy to the U.S. economy. Retrieved May 11, 2023 from <https://www.riaa.com/reports/the-true-cost-of-sound-recording-piracy-to-the-u-s-economy/#:~:text=The%20U.S.%20economy%20loses%20%2412.5,and%20in%20downstream%20retail%20industries.>
- Statista (n.d.). Revenue from music streaming in the United States from 2010 to 2022 (in billion U.S. dollars). Statista - The Statistics Portal. Retrieved May 12, 2023, from <https://www.statista.com/statistics/437717/music-streaming-revenue-usa/>.
- Sheehan, B., Tsao, J., & Pokrywczynski, J. (2012). Stop the music! How advertising can help stop college students from downloading music illegally. *Journal of Advertising Research*, 52(3), 309-321.
- Sinclair, G., & Green, T. (2016). Download or stream? Steal or buy? Developing a typology of today's music consumer. *Journal of Consumer Behaviour*, 15(1), 3-14.
- Son, H., Lee, S., Hong, J., & Drumwright, M. E. (2016). The effects of ad-brand personality incongruence in CSR advertising: The mediating role of cognitive thoughts and the moderating role of guilt. *American Academy of Advertising Conference Proceedings*, 231.
- Stafford, M. R. (1996). Tangibility in services advertising: An investigation of verbal versus visual cues. *Journal of Advertising*, 25(3), 13-28.
- Styven, M. (2010). The need to touch: Exploring the link between music involvement and tangibility preference. *Journal of Business Research*, 63(9/10), 1088-1094.
- Sun, T., Youn, S., Wu, G. and Kuntaraporn, M. (2005). Online word-of-mouth: An exploration of its antecedents and consequences. *American Academy of Advertising Conference Proceedings*, 27.

- Tannenbaum, M. B., Hepler, J., Zimmermn, R. S., Saul, L., Jacobs, S., Wilson, K., Albarracin, D. (2015). Appealing to fear: A meta-analysis of fear appeal effectiveness and theories. *Psychological Bulletin*, 141(6), 1178-1204.
- Thompson, D. (2015, January 25). The death of music sales. Retrieved December 14, 2016, from <http://www.theatlantic.com/business/archive/2015/01/buying-music-is-so-over/384790/>
- Turner, M. M., Mabry-Flynn, A., Shen, H., Jiang, H., Boudewyns, V., and Payne, D. (2018). The effects of guilt appeal intensity on persuasive and emotional outcomes: The moderating role of sponsor motive. *Journal of Nonprofit and Public Sector Marketing*, 30(2), 134-150.
- Vera, J. and Espinosa, M. (2019). Consumer involvement as a covariant effect in rethinking the affective-cognitive relationship in advertising effectiveness. *Journal of Business Economics and Management*, 20(2), 208-224.
- Weijters, B., & Goedertier, F. (2016). Understanding today's music acquisition mix: a latent class analysis of consumers' combined use of music platforms. *Marketing Letters*, 27(3), 603-610.
- Witte, K. and Allen, M. (2000). A meta-analysis of fear appeals: Implications for effective public health campaigns. *Health Education and Behavior*, 27(5), 591-615.
- Wu, W. Y., Lu, H.Y. and Chen, L. T. (2017). The moderating roles of involvement and heuristics on advertising effectiveness: A study of financial advertisements. *Asian Journal of Business and Accounting*, 4(1), 1-21.
- Zaichkowsky, J. L (1985). Measuring the involvement construct. *Journal of Consumer Research*, 12 (December), 341-352.
- Zhang, H., Sun, J., Liu, F., & Knight, J. G. (2014). Be rational or be emotional: Advertising appeals, service types and consumer responses. *European Journal of Marketing*, 48(11/12), 2105-2126.
- Zinn, H. C. and Manfredi, M. J. (2000). An experimental test of rational and emotional appeals about a recreation issue. *Leisure Sciences*, 22, 183-194.

Table 1
Means, Standard Deviations, and Correlations Between Study Variables

Variable	\bar{x}	SD	1	2	3	4	5	6	7	8	9
1. Ad Appeal	1.76	0.99	-								
2. Purchase Intention	2.70	1.79	.04	-							
3. Negative Affect	2.78	1.08	-.22*	.046	-						
4. Positive Affect	3.57	1.23	.26*	.48*	-.01	-					
5. Interest in the Service	3.88	1.42	.06	.68*	.13	.68*	-				
6. Likelihood of Recommending the Service	3.52	1.37	.09	.70*	.121	.66*	.88*	-			
7. Ad Recall	2.46	0.61	.22*	-.04	-.12	-.002	-.01	-.001	-		
8. Music Involvement	2.07	0.74	-.003	-.05	-.03	.03	.02	.03	.01	-	
9. Price Consciousness	5.18	1.16	.06	-.01	-.05	.08	.04	.002	.03	.01	-

* Correlation is significant at the 0.01 level

Table 2

ANOVA Results for Ad Appeal Main Effect and Ad Appeal x Music Involvement Interaction

Dependent Variable and Effect	F-test Results	Effect Size (Partial Eta-Squared)
Ad Recall		
Ad Appeal	F (2,142) = 5.358 (p = .006)*	$\eta^2 = .07$
Ad Appeal x Music Involvement	F (4,142) = 1.788 (p = .135)	
Interest in Music Service		
Ad Appeal	F (2,142) = .451 (p = .638)	
Ad Appeal x Music Involvement	F (4,142) = 1.339 (p = .258)	
Likelihood of Recommending Music Service		
Ad Appeal	F (2,142) = .643 (p = .527)	
Ad Appeal x Music Involvement	F (4,142) = 1.61 (p = .175)	
Purchase Intentions		
Ad Appeal	F (2,142) = 2.723 (p = .069)*	$\eta^2 = .037$
Ad Appeal x Music Involvement	F (4,142) = 2.574 (p = .04)*	$\eta^2 = .068$
Simple effects for Low Music Involvement	(F (2, 142) = 4.04, p = .02)*	$\eta^2 = .053$
Simple effects for Medium Music Involvement	(F (2, 142) = .541, p = .583)	
Simple effects for High Music Involvement	(F (2, 142) = .1791, p = .171)	
Negative Affect Response to Ad		
Ad Appeal	F (2,142) = 5.97 (p = .003)*	$\eta^2 = .078$
Ad Appeal x Music Involvement	F (4,142) = 1.027 (p = .396)	
Positive Affect Response to Ad		
Ad Appeal	F (2,142) = 7.854 (p = .001)*	$\eta^2 = .10$
Ad Appeal x Music Involvement	F (4,142) = 1.512 (p = .202)	

Table 3

ANOVA Results for Ad Appeal x Price Consciousness Interaction for Purchase Intentions

Dependent Variable and Effect	F-test Results	Effect Size (Partial Eta-Squared)
Purchase Intentions		
Ad Appeal x Price Consciousness	F (4, 129) = 2.977 (p = .022)*	$\eta^2 = .085$
Simple effects for Low Price Consciousness	(F (2, 129) = 1.322 (p = .27)	
Simple effects for Medium Price Consciousness	(F (2, 129) = 4.36 p = .015)	$\eta^2 = .063$
Simple effects for High Price Consciousness	(F (2, 129) = 2.136, p = .122)	

Figure 1
Interaction Between Ad Appeal and Music Involvement for Purchase Intentions

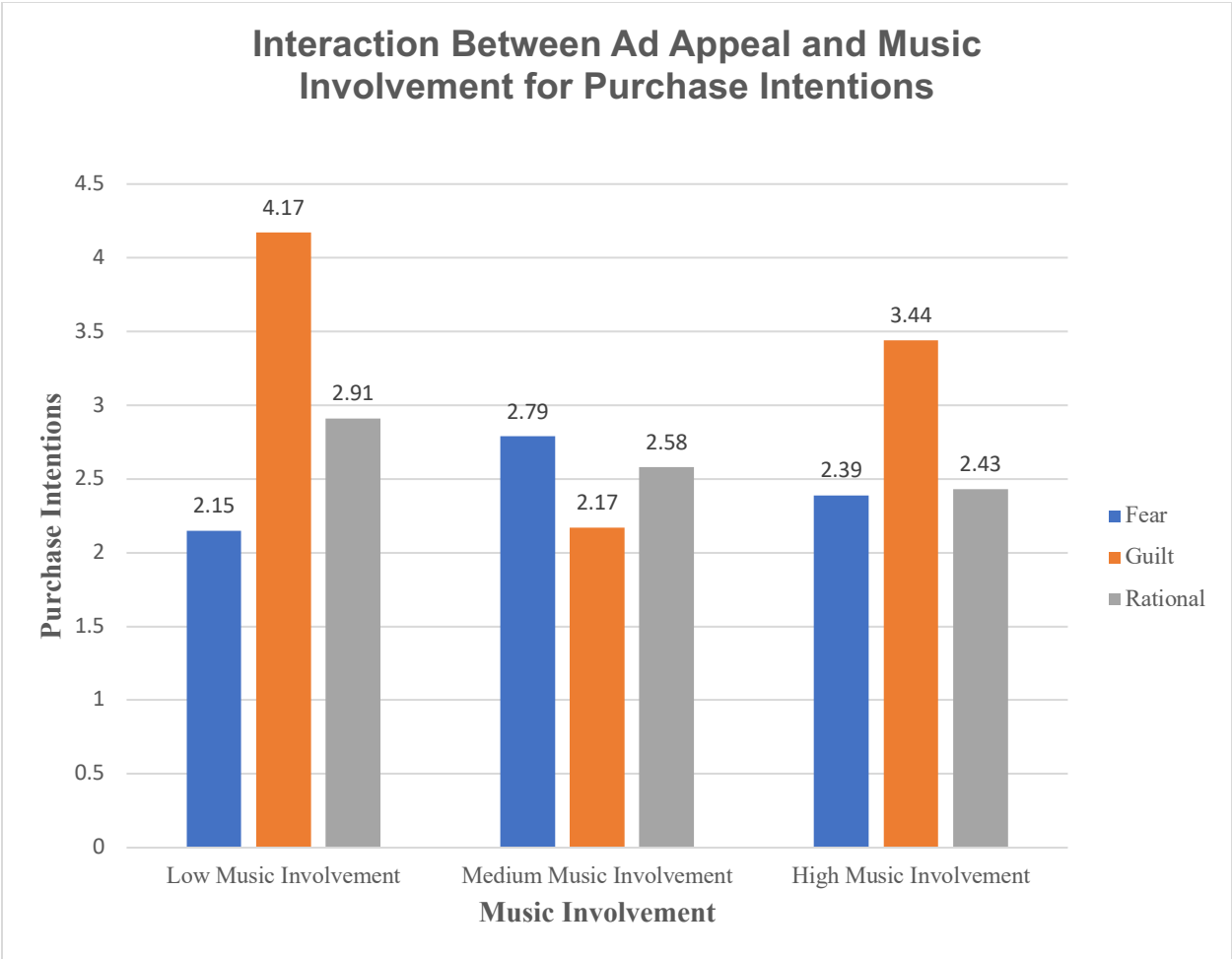
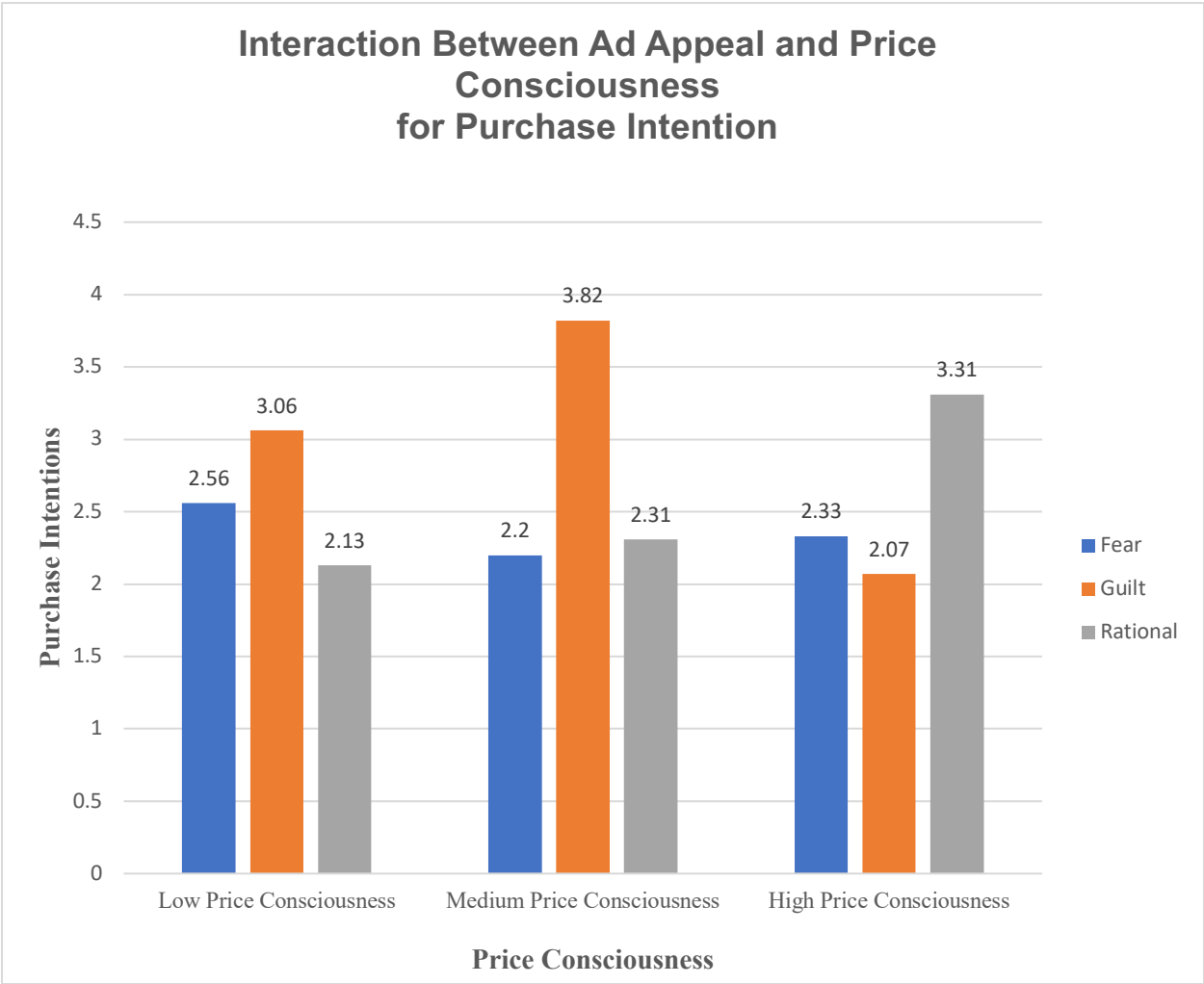


Figure 2
Interaction Between Ad Appeal and Price Consciousness for Purchase Intentions



PERCEIVED CONTROL AND (UN)STRUCTURED CONSUMPTION

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Abstract: This research explores how people's perceived control interacts with stimuli in the environment to influence product preference. We use theory on perceived control, compensatory consumption, and meaning making of stimuli to propose and test a counterintuitive effect of preference for uncertain, unstructured products. The results from three pretests and one main study demonstrate initial support for the interaction between perceived control and meaning making of marketing stimuli with or without mystery. Consumers with lowered perceived control, after experiencing marketing stimuli with mystery, are more likely to prefer uncertain, unstructured products (over similar certain products) compared to those with high perceived control. The present research demonstrates that surprising marketing stimuli with mystery (vs. without) may influence people with low perceived control by engaging in a continuous meaning making process that serves as compensatory behavior to potentially restore perceived control. The findings have implications for marketing theory and practice.

Introduction

Imagine a reality where most consumers are suddenly forced to stay home, companies shut down, the unemployed number of American people rises to over 30 million, and thousands of individuals perish daily, all due to a global pandemic. Such a grim environment would impact the mental state of anyone. Indeed, over 70% of Americans reported in mid-April 2020 that they perceive the coronavirus, the cause of the 2020 pandemic, as a high threat to the U.S. and to the global economy (Newall & Jackson 2020). Consequently, consumers' perceived control, the perceived ability that one can attain desired outcomes and avoid undesired outcomes (Skinner 1966), can be negatively impacted. A similarly terrible event, the terrorist attack of September 11, 2001, shocked the world and resulted in American people's feeling that they are lacking control over outcomes in their reality. As a result, consumers aimed to correct their vulnerable state of feeling out of control, which became evident in a shift toward buying more structured and bounded products (Cutright 2012). Thus, when consumers collectively experience a disturbed sense of perceived control, the resulting changes in consumer behavior are noticeable in the economy and represented as a higher interest in certain products. Because the social, political, and economic spheres are always in flux, and more so during a pandemic, it is important to investigate how this environment will influence people's sense of perceived control and its impact on consumer behavior.

Maintaining control of one's environment is an essential human need (Averill 1973; Botti & McGill 2006). Most humans aim to manage stable levels of their psychological condition, such as their feelings of control over their environment (Kay, Gaucher, Napier, Callan, & Laurin 2008). When people experience a self-discrepancy, a difference between how one currently perceives oneself and how one desires to be (Higgins 1987), people will engage in some type of compensatory behavior with the goal of resolving the discrepancy (Mandel, Rucker, Levav, & Galinsky, 2017). For instance, people with low perceived control

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have been found to believe more strongly in agents that impose order, such as a god or an authoritative government (Kay et al., 2008; Kay, Whitson, Gaucher, & Galinsky, 2009). Also, while experiencing low perceived control, people showed a higher preference for products or logos with boundaries over ones that were unbounded (Cutright 2012). Additionally, research has found that people whose perceived control was disturbed demonstrated a higher preference for hierarchy in the workplace vs. equality due to the notion that the perception of organizational hierarchy provides structure (Friesen, Kay, Eibach, & Galinsky 2014). In other words, when perceived control is lowered, compensatory behavior is demonstrated by seeking structure in one's surroundings.

However, what if people are not actively seeking to resolve the self-discrepancy of low perceived control and at the same time are involved in a consumption experience such as watching TV and perceiving marketing stimuli – Could the information that they are actively viewing influence their subsequent and unrelated product preference? If consumers who are experiencing low perceived control are faced with a choice between a certain product vs. an uncertain or unstructured product, they should be expected to choose the certain, structured option. Based on the perceived control literature and the established significance of compensatory behavior, it is expected that a certain product experience (vs. an uncertain product experience) would bring structure and would appear more attractive to consumers with disturbed perceived control.

There are many instances where company offerings are framed as uncertain, for example, subscription boxes (curated items of clothing, cosmetics, personal care products, food, beverages), mystery boxes (various unknown items packaged and sold by Amazon), mystery menu items (Taco Bell), mystery flavors (the filling of Oreo cookies). In addition, during the 2020 pandemic, there was a large increase in consumers' online purchases. One survey found that 47% of consumers would buy groceries online over a physical store (Bread, 2020), while another reported that the increase in e-commerce was equal to 10-years-in-8-weeks when the 2020 pandemic started (Kohli et al., 2020). Moreover, 20% of consumers shopped online for frozen foods, and 17% shopped for perishable groceries, choosing home delivery vs. store pickup (PWC, 2020). Switching from choosing your own groceries to trusting a shopper to pick your vegetables represented a change in the existing structure and introduced additional uncertainty. Thus, with so many instances of uncertain or unstructured product experiences, it is important to understand the drivers of consumer behavior in such product decisions.

Humans are constantly perceiving and evaluating their environment by making sense of their surroundings. Emotion and cognition theorists agree that a continuously operating evaluation process occurs in individuals in response to perceiving the environment (Arnold 1960; Blumenthal 1977; Plutchik 1980; Lazarus 1991; Sherer 2001). According to the meaning maintenance model, people find meaning in the links between people, places, or objects (Heine, Proulx, & Vohs 2006). People organize their knowledge as mental representations of expected relationships. When meaning associations are disrupted, humans will attempt to resolve the meaning discrepancy by reaffirming alternative relations (Heine et al., 2006). The present research argues that people with lowered perceived control who are engaged in meaning making will choose to continue to engage in meaning integration as a form of compensatory behavior. This continued meaning integration goal will result in a higher preference for unstructured products (over structured ones) because they offer an opportunity for additional meaning integration. Thus, while a large body of prior research would suggest that consumers with low perceived control will likely choose certain, structured over uncertain, unstructured products, the present research argues the opposite claim.

The Current Research

The purpose of this research is to integrate theory from perceived control, compensatory behavior, and meaning maintenance to explain and test a counterintuitive effect of lowered perceived control on preference for unstructured products. The present research argues that low perceived control

individuals would show higher preference for uncertain, unstructured products over certain, structured products. The present research aims to answer the following research questions: If individuals with disturbed perceived control perceive marketing stimuli, would the information presentation of the stimuli interact with perceived control to influence consumers' product preference? What is the underlying mechanism of this interaction effect?

This research makes an important contribution to theory and practice. First, we add to the theory of compensatory behavior by proposing the mechanism of a counterintuitive effect of low perceived control on product preference for unstructured consumption and testing it. Next, we add to practice by demonstrating that marketing stimuli with mystery can interact with people's perceived control to influence product preference for unstructured consumption.

This paper is organized in the following manner. First, we review the literature on perceived control and compensatory behavior. Next, we review research on meaning making and its connection to appraisal of marketing stimuli. Finally, we develop and test hypotheses in the main study. Theoretical and practical implications are discussed.

Theoretical Background

Perceived Control

Perceived control is the observed ability that one can reach desirable outcomes and prevent undesirable ones (Skinner 1996). Perceived control (also referred to as *sense of personal control*) is important because it is the foundation for people's behavior and motivation (Cutright 2012; VanBergen & Laran 2016). The concept represents how people understand the relationships among causes of events and end states in their everyday actions (Skinner et al., 1988). Perceived control is a function of the causes people attribute to outcomes in their lives, the role people themselves play in influencing events, and an evaluation of their available resources in order to reach goals (Skinner et al., 1988). One's sense of perceived control is influenced by (1) upbringing, (2) socioeconomic status, (3) current events, or a combination of these factors (Ellis et al., 2009; Mittal & Griskevicius, 2014; Mittal, Griskevicius, & Haws, 2020).

First, maintaining control of one's environment is an essential human need (Botti & McGill, 2006). This need begins developing during childhood (Ellis, Figueredo, Brumbach, & Schlomer, 2009; Mittal & Griskevicius, 2014; VanBergen & Laran, 2016). Growing up, children undergo a process of influence over their attitudes and behaviors as their parents aim to prepare them as functioning adults in society (Maccoby and Martin 1983). In Western cultures, these goals are consistent with a focus on promoting children's autonomy (Keller et al., 2006; VanBergen and Laran, 2016). Most children are raised to strive to become responsible for the outcomes of their actions and to believe that achieving control of their circumstances is desirable. As a result, children's ability to maintain a high sense of perceived control is learned as necessary for reaching autonomy and can be assumed to be an important goal during their adult life (VanBergen and Laran, 2016).

Second, perceived control is influenced by people's socioeconomic status or the frequency of family conflict during childhood. For example, Ellis et al. (2012) demonstrated that those who experience poverty or other stressors, such as psychological adversity due to family environment uncertainty, may have impaired childhood development. Additionally, harsh and unpredictable environments in early life can lead to unfavorable behaviors during adulthood, such as risk-taking and aggression (Ellis et al., 2009). Research found that in the process of growing up, people learn to respond adaptively to cues that signal uncertainty, thus lowering perceived control, by demonstrating opportunistic behaviors such as taking advantage of immediate benefits (Griskevicius et al., 2013; Mittal et al., 2015).

Finally, sense of perceived control can be influenced by current events. From evolutionary theory, it is known that people respond adversely to extrinsic stress (or environmental stress), which is the occurrence of largely uncontrollable events in one's reality that pose a potential threat to one's survival (Chisholm et al., 1993; Mittal et al., 2020). A seemingly unstable environment can stem from stock market volatility, recession, the future faith of one's country, such as during elections, and any other mortality uncertainty, such as terrorist acts or a pandemic (Mittal et al., 2020). Such uncertain reality will act as an environmental stressor to people, causing a negative state of anxiety and worry and affecting their subjective life expectancy. In a study that manipulated extrinsic stressors, Mittal et al. (2020) measured participants' life expectancy and found that experiencing a financial stressor or a general stressor was a significant predictor of people's subjective life expectancy. Thus, in times of extrinsic stressors such as a global pandemic, it can be expected that a large number of the population could feel a lowered sense of perceived control.

Compensatory Behavior

When people's sense of perceived control is disturbed, they engage in compensatory behavior by seeking out structure in their surroundings (Cutright 2012). When people experience a psychological threat, studies demonstrate that people tend to engage in compensatory or defensive processes with the goal of defending and maintaining their existing beliefs and behavior. Cutright (2012) demonstrates that, under low sense of perceived control, people tend to have higher preference for products or logos with boundaries over ones that are unbounded. Choosing products with boundaries allows people to regain their sense of order and acts as compensatory behavior.

Moreover, consumers who experience a disrupted sense of perceived control tend to engage in effortful product experiences (Cutright and Samper 2014). Particularly, when feeling low in perceived control, consumers tend to choose products that require high personal effort (e.g., a Nike shoe ad that emphasized high effort needed vs. low effort needed to obtain desired results was rated more positively). Consumers tend to associate high effort with working toward their goals, which is a belief that they can restore their sense of perceived control (Cutright and Samper 2014).

Additionally, people with lowered perceived control tend to pursue structure, such as engaging in hierarchical social relationships (Friesen et al. 2014). Specifically, people whose perceived control was disturbed demonstrated higher preference for hierarchy in the workplace vs. equality in the workplace due to the notion that the perception of organizational hierarchy provides structure (Friesen et al. 2014). Perceiving structure, such as hierarchical relationships, reestablishes confidence in people after their sense of perceived control has been threatened (Rutjens et al., 2013; Friesen et al., 2014).

Perceived control fits in the compensatory behavior literature as one instance of a potential self-discrepancy, i.e., an incongruity between a person's current perception of oneself and her ideal perception of oneself (Higgins, 1987). Such self-discrepancies can happen in someone's perceptions of their intelligence, power, gender or social identity, and perceived control (Mandel et al., 2017). When a self-discrepancy is experienced, people are motivated to engage in behavior to reduce the discrepancy, i.e., compensatory behavior. Mandel et al. (2017, p. 138) propose five compensatory strategies that people use to resolve a self-discrepancy. The first one, direct resolution, is accomplished through actions that resolve the source of the discrepancy. The following one, symbolic self-completion, is reached by behavior that signals mastery in the domain of the self-discrepancy. Next, dissociation is behavior that separates a person from offerings associated with the self-discrepancy. Escapism is done by actions that distract an individual from thinking about the self-discrepancy.

Finally, fluid compensation occurs when people handle a self-discrepancy by affirming the self in another dimension of their identity, distinct from the self-discrepancy (Mandel et al., 2017). One form of fluid compensation is meaning maintenance. The present research proposes that fluid compensation as

meaning maintenance will interact with people's lowered perceived control to influence product preference outcomes. If consumers who experienced low perceived control are faced with a decision between two products of equal value where one option is certain and structured, and the other option is the same in value but uncertain and unstructured, which option would they choose? The present research argues that consumers will be more inclined to prefer uncertain products rather than certain ones as long as they are engaged in meaning maintenance and offers the rationale in the next section.

Meaning Maintenance

Meaning maintenance was categorized as an example of the fluid compensation strategy, one of five strategies used by people who experience a self-discrepancy, such as disturbed sense of perceived control (Mandel et al., 2017). The Meaning Maintenance Model (MMM; Heine et al., 2006) posits the idea that individuals are always making meaning by interpreting relationships and creating mental representations. The MMM further proposes that, when people observe a meaning disruption, which is a discrepancy in a meaning structure, they can overcome the discrepancy by finding meaning on another dimension.

Meaning making, as a general cognitive process, takes place virtually all the time. Sensemaking, a type of meaning making, is discussed in the psychology literature on surprise and appraisal (Meyer et al., 1997; Wilson et al., 2005; Maguire et al., 2011; Foster & Keane, 2015; Noordewier et al., 2016). Surprising stimuli, defined as novel or unexpected, introduce new data into people's perceptions. Surprising stimuli are initially perceived as a discrepancy and demand sensemaking (Itti & Baldi 2009). The goal of sensemaking is to resolve knowledge-discrepant input by integrating it with existing knowledge structures in order to restore the consistency of meanings in the environment and determine subsequent behavior (Meyer et al., 1997; Schutzwahl, 1998; Maguire et al., 2011). Maguire et al. (2011) specifically state that the feeling of surprise prompts appraisal and reflects a person's attempt to make sense of an unexpected event via cognitive analysis of the surprising stimuli. Thus, sensemaking (a form of meaning making) is the process of appraisal of an event's implications to an individual and his/her subsequent behavior.

Sensemaking as a variable has been manipulated by varying the information presented in scenarios in studies on surprise. Maguire et al. (2011) experimented with a "general" vs. a "specific" scenario, where the latter provided more information, facilitating the resolution of a surprising outcome. Foster and Keane (2015) manipulated sensemaking by varying the scenario description as known vs. less-known by varying the information in each scenario. The "known" scenarios provided more relevant cues than the "less known" ones, thus again facilitating the appraisal of surprise.

Sensemaking as a form of meaning making is discussed here as a factor that would interact with people's low perceived control. The present research argues that people with low perceived control (vs. high) will be influenced differently by stimuli in their setting depending on the information provided by the stimuli. The present research manipulates the meaning making process by varying the information provided in marketing stimuli that are presented to participants in a setting. To evoke continued meaning integration (vs. meaning integration that is completed immediately), a mystery prize (vs. a known prize) is presented to participants. When marketing stimuli prompt sensemaking and don't contain enough information to resolve any meaning discrepancies (a mystery prize), people with low perceived control will be motivated to continue meaning integration until the discrepancy is resolved. The mystery prize has missing information, which is perceived as a knowledge discrepancy. When marketing stimuli prompt sensemaking and contain enough information to resolve any meaning discrepancies (a known prize), people with low perceived control will not be motivated to continue meaning integration because the discrepancy is resolved immediately.

Hypotheses Development

We propose that one's sense of perceived control (PC) will interact with meaning making of marketing stimuli. If consumers with disturbed perceived control are observing content with marketing stimuli, they will engage in sensemaking of the cues in the setting they are perceiving. We argue that the process of meaning making (i.e., sensemaking) can lead people with a low sense of perceived control to feel as if they have mastered the meaning of relationships in their surroundings. Thus, engaging in continued meaning making will serve as a type of compensatory behavior that allows consumers to restore structure and regain their sense of perceived control.

Based on the demonstrated tendency of people to engage in compensatory behavior when their PC is disturbed, we propose that the appraisal of marketing stimuli with mystery (vs. without mystery) will serve as a form of compensatory behavior. This appraisal process begins with an analysis of the presented marketing cues, with the goal of understanding their meaning and resolving any meaning discrepancies, such as missing information. If the discrepancy in perceived meanings based on information provided by marketing cues is unresolved, people will be motivated to continue to acquire additional information in order to resolve the discrepancy introduced by the marketing stimuli. Gathering enough information and processing the meanings of cues is conceptualized as reaching cognitive mastery of one's surroundings, where one's environment is orderly and predictable again (Noordewier et al., 2016). We argue that when people reach cognitive mastery, they will feel they have restored order in their environment. This goal attainment will help them regain their sense of control. Thus, engaging in meaning appraisal serves as a type of compensatory behavior that allows consumers to restore structure and regain PC.

We argue that low PC vs. high PC impacts consumers' product preference in subsequent consumption contexts. If a consumer's PC is disturbed, then it is logical to expect that they would be more likely to choose certain product experiences (i.e., without unknown elements) in a subsequent context. The present research, however, argues that after encountering marketing stimuli with mystery, people with lowered PC will choose products with unknown, uncertain elements over similar known and predictable products in a subsequent purchase context. This counterintuitive effect is explained with the following reasoning. Because lowered PC provokes people to engage in compensatory behavior, the cognitive appraisal associated with unknown products in subsequent contexts will appear more attractive as an opportunity for compensatory behavior to people with lowered PC compared to people with high PC. The following hypothesis is proposed:

H₁: If consumers feel low perceived control and encounter marketing stimuli with mystery, then they will be more likely to choose uncertain products (over similar certain products) in a subsequent context, compared to consumers with high perceived control.

Conversely, when encountering marketing stimuli without mystery, people will appraise and resolve their meaning almost instantly. In such cases, consumers with low PC will not have an opportunity to engage in continued meaning integration and will not experience the goal attainment of cognitive mastery as a type of compensatory behavior. Without a goal to reach cognitive mastering by engaging in further meaning making, people with low PC will seek structure in their environment. In that case, products that are certain and structured would appear more appealing to people with low PC over products that are uncertain and unstructured. The following hypothesis is proposed:

H₂: If consumers feel low perceived control and encounter marketing stimuli without mystery, then they will be less likely to choose uncertain products (over similar certain products) in a subsequent context compared to consumers with high perceived control.

Main Study

Research Design and Sample Characteristics

The purpose of this study was to evaluate the effect of perceived control and its interaction with marketing stimuli on preference for unstructured options. The study employed Perceived Control (Low vs. High) x Marketing Stimuli (Mystery Prize vs. Known Prize), between-subjects design.

Participants were recruited from Amazon Mechanical Turk (MTurk) (N=307, 40.1% female, Mage=35, SD=12). Participants took the designed experiment at their own convenience and were compensated approximately \$1.00, as announced in the task posted on MTurk, plus an additional \$1.00 for the Prize manipulation, further explained below. Fifty-nine participants indicated that they had received an unexpected bonus payment of \$1.00 recently (i.e., they participated in one of the pretests that evaluated the prize manipulation). They were excluded from the analysis, leaving N=248 in the sample. This decision was made to ensure internal validity related to the potency of the marketing stimuli manipulation. If participants had already experienced the manipulation, then they could not be expected to engage in meaning making the second time they were presented with the same manipulation.²

Perceived Control. Participants were told that the first task in the study aimed to understand consumers' reactions to their environment. In reality, this task manipulated participants' sense of perceived control (PC). Participants saw one of two conditions: *high* or *low* sense of perceived control (Kay et al., 2008; Cutright & Samper, 2014; Vanbergen & Laran, 2016). In the high PC condition, participants were asked to describe a recent event when they felt in control of the situation. They were asked to describe their actions or behaviors that led them to the outcome of the event. In the low PC condition, participants were asked to describe a recent event when they felt out of control of the situation. They were asked to describe their actions or behaviors that led them to the outcome of the event.

The PC manipulation was pretested with participants from Mturk (N=133, Mage=34, SD = 12, female = 50.4%). Participants were asked to indicate how high/low of perceived control they felt: How much control did you feel you had over the events you wrote about? (from 1/not much to 7/very much). The manipulation was successful. Participants in the low PC condition experienced less control compared to participants in the high PC condition ($M_{low}=2.80$ SD=2.01, $M_{high}=5.76$ SD=1.33, $t(1, 131)=9.846$, $p<.001$).

A ninety-second timer was set on the study platform to ensure that participants spent time completing the task before advancing to the rest of the experiment. At this time, participants were informed that they had completed one task and that, ostensibly, they would participate in a different task next. This misleading manipulation was revealed to participants in a debriefing statement at the end of the study.

Marketing Stimuli: Mystery Prize vs. Known Prize. Next, participants were informed that they would be completing a reading and comprehension task. Participants read an article about a Canadian highway. The article was copied from Wikipedia (Appendix A). One or two paragraphs of the article were presented on the screen at a time, and a comprehension question was presented after every screen. The questions were introduced to maintain engagement with the task and to support the study set-up as a reading and comprehension experiment. The questions prompted yes/no answers, and there were no negative consequences to participants, regardless of how they answered.

After four screens of the Canadian Highway article excerpts, participants were presented with the Marketing Stimuli (Mystery Prize vs. Known Prize) manipulation. This manipulation was pretested to evoke surprise. We chose to evoke surprise with the goal to get participants' attention and to prompt

² All data for the main study and the pretests were collected in the summer of 2018, before the 2020 pandemic. Project was approved by the IRB at Florida Atlantic University, project # 1097991-1

meaning making of the unexpected marketing stimuli (N=156, Mage = 36, SD=11, 44.2% female). In the pretest, participants were asked the surprise manipulation check question: How surprised are you? (from 1/not at all to 9/very much). The results supported a reliable surprise manipulation ($M_{\text{known}}=8.39$, $SD=1.54$, $M_{\text{mystery}}=7.98$, $SD=1.46$, $M_{\text{control}}=5.61$, $SD=2.59$; $F(2, 153)=31.1$, $p<.00$).

In this main study, as participants were reading the Wikipedia article, they suddenly saw a screen that stated, "We are interrupting..." Then, the marketing stimuli manipulation was presented. In the Known Prize condition, participants were presented with: "Congratulations! You have won a prize! You have been selected on a random basis to receive a bonus of \$1.00 upon completion of the study."

In the Mystery Prize condition, participants were also informed that they had won a prize. They were presented with: "Congratulations! You have won a prize! You have been selected by the researchers to receive a prize. You will learn more about the prize, and why you are receiving it, at the end of the study."

Marketing Stimuli Manipulation Check. Next, the curiosity measure as a manipulation check for appraisal of marketing stimuli was presented. These items asked participants (from 1/not at all to 7/very much): "At this moment, how curious are you about why you are receiving the prize?"; and "At this moment, how curious are you about the amount of the prize?" (Wang & Huang, 2018). The means for each condition showed that participants in the Mystery Prize condition felt more curious compared to participants in the Known Prize condition ($M_{\text{known}}=5.47$, $SD=1.54$, $M_{\text{mystery}}=6.10$, $SD=1.35$, $t(1,305)=3.80$, $p<.001$).

Curiosity was introduced to evaluate the ease of appraisal of marketing stimuli and thus to create a manipulation check for the motivational drive to engage in meaning making of the marketing stimuli depending on the information they contain. When marketing stimuli with mystery elements are presented, they do not provide all the necessary information to resolve the discrepancy introduced. As a result, a motivational drive is prompted with the goal of seeking out additional information to close the gap between what is known and what is unknown. Curiosity was chosen as a proxy manipulation check for appraisal (i.e., meaning making) of marketing stimuli because curiosity is manifested as the acquiring of additional information to resolve a gap in one's current knowledge. Curiosity has been conceptualized as a cognitively prompted deprivation experienced when one perceives a gap in knowledge (Lowenstein, 1994). Curiosity is further defined as a motivational drive that produces a desire for knowledge that can be satiated by acquiring new knowledge (Wiggin et al., 2018). Nisbett and Wilson (1977) showed that consumers have poor access to the processes by which they regulate their emotions, make sense of their surroundings, and report on their perceptions. While consumers may not be able to articulate that they are undergoing appraisal of marketing stimuli, they should be able to indicate if they feel curious about a stimulus.

Participants then continued to read the Wikipedia article. Upon completion of the article, participants' affect was evaluated by a positive affect scale (adapted from Valenzuela et al., 2010). Positive affect was evaluated as a control variable to determine whether high PC participants would experience higher positive affect compared to low PC participants. To evaluate their positive affect, participants were asked to indicate their feelings on three affect items (excited, pleased, happy) from "1/not at all" to "7/very much." There was no significant difference between the positive affect of any of the groups.

Dependent Variables. Next, participants were presented with the dependent variable. To evaluate their buying intention, participants were asked to imagine a scenario in which they had the opportunity to choose between one of two gifts (Option A or Option B). Option A comprised photos of the following three snacks: kettle-cooked chips, honey maple peanuts, and Belgian cookies with chocolate sauce (see Appendix B).

The snacks were pretested. Fifteen snacks were photographed by the researchers, and three photos were used in the main study to describe the dependent variable. In a pretest, participants were asked to evaluate the photos (N=52, Mage = 34, SD=9. 42% female). Below each snack picture, participants indicated their answer on a scale of 0-100 (ranging from “not at all/the least” to “very much/very likely/the most”) to the following questions: (1) How surprising is this snack?, (2) What is the likelihood that you would enjoy this snack?, (3) How novel is this snack?, (4) How appropriate is this snack as a gift? (Table 1).

Table 1. Description of Snacks and Ratings of Photos (rated from 0-100)

Snack	How surprising	Likelihood to enjoy	How novel	Appropriate as a gift
Belgian cookies & chocolate spread	39.14	59.07	50.79	55.52
Kettle cooked chips with sea salt and pepper	15.64	63.93	19.80	27.07
Honey maple peanuts	25.20	61.16	26.93	47.95

Three photos from the fifteen were chosen based on participants’ ratings and used in the main study. The photos were chosen to include at least two snacks with a predictable taste (i.e., chips and peanuts), so the overall taste and quality of the gift was less ambiguous compared to the other choice - Option B, presented as “a selection of three snacks that would be selected for you based on your likes and dislikes.” To emphasize the uncertainty of Option B, a picture of a box with question marks was presented on the screen (Appendix B). Participants were asked to indicate how likely they were to choose each option on a continuous variable (1/definitely likely to choose Option A to 9/definitely likely to choose Option B).

Finally, participants were presented with the debriefing statement, which explained that all study tasks and questions were part of the same study. All participants were informed that they would be receiving a \$1.00 bonus as their “prize.”

Results

ANOVA was performed, with Perceived Control (low vs. high) as the independent variable and Product Preference variable (on a scale from 1/definitely likely to choose Option A, the certain, structured option to 9/definitely likely to choose Option B, the uncertain, unstructured option) as the outcome variable. There was no significant main effect of the factor on the outcome variable ($F(1, 244)=.398, n.s.$).

Two-way ANOVA was performed with Perceived Control (low vs. high) and Marketing Stimuli (Mystery Prize vs. Known Prize) as factors and Product Preference (on a scale from 1/definitely likely to choose Option A, the certain, structured option to 9/definitely likely to choose Option B, the uncertain, unstructured option) as the outcome variable. Descriptive statistics for Product Preference are shown in Table 2.

Table 2. Main Study – Product Preference Descriptive Statistics

		Mean	Std. Dev.	N
Known Prize	Low PC	4.43	3.40	61
	High PC	5.07	2.98	56
Mystery Prize	Low PC	5.70	2.88	57
	High PC	4.58	3.07	74

There was no significant main effect of Perceived Control on Product Preference ($F(1, 244)=.362$, n.s.). There was no significant main effect of Marketing Stimuli on Product Preference ($F(1, 244)=.987$, n.s.). The interaction term of the variables was significant ($F(1, 244)=4.995$, $p<.05$, observed power =.605).

Table 3. Main Study – ANOVA Between-Subjects Effects

	df	F	Sig.
Corrected Model	3	2.07	.10
Intercept	1	626	.00
Marketing Stimuli	1	0.99	.32
Perceived Control	1	0.36	.55
Perceived Control * Marketing Stimuli	1	4.99	.02
Total	248		

Graphing the means below demonstrates the interaction effect (Figure 1).

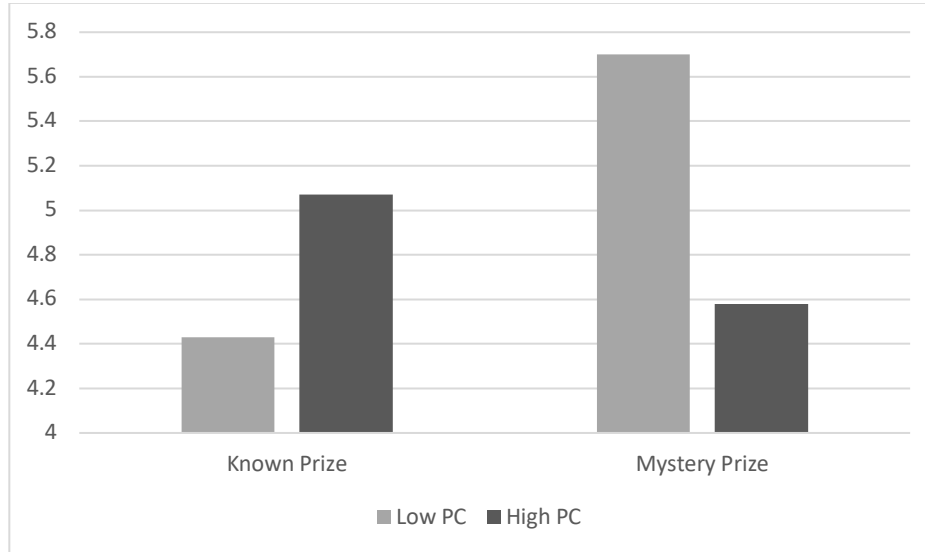


Figure 1: "Interaction Effect of Perceived Control and Marketing Stimuli on Product Preference"

The simple effects of the interaction were examined with pairwise comparisons to determine the difference between groups, and the results are shown in Table 4.

Table 4. Interaction Effect: Pairwise Comparisons Table

			Mean Difference	Std Error	Sig.	95% CI Lower	95% CI Upper
Known prize	Low PC	High PC	-0.645	0.572	0.261	-1.772	0.482
	High PC	Low PC	0.645	0.572	0.261	-0.482	1.772
Mystery prize	Low PC	High PC	1.121*	0.545	0.041*	0.047	2.194
	High PC	Low PC	-1.121*	0.545	0.041*	-2.194	-0.047

Interaction Effect: Pairwise Comparisons – Univariate Tests Table

		Sum of squares	df	Mean Square	F	Sig.
Known prize	Contrast	12.154	1	12.154	1.271	0.261
	Error	2332.576	244	9.560		
Mystery prize	Contrast	40.438	1	40.438	4.230	0.041*
	Error	2332.576	244	9.560		

Based on the results, the effect of Perceived Control and sensemaking of Marketing Stimuli was significant in the Mystery Prize condition ($F(1,244)=4.23, p<.05$), providing support for H_1 . After experiencing a marketing stimulus with mystery (i.e., a mystery prize), people with low PC were more likely to choose uncertain, unstructured products compared to people with high PC.

While in the Known Prize condition, participants with low PC were less likely to choose the uncertain option compared to participants with high PC, the difference was not significant. Thus, the data failed to support H_2 .

Discussion

In this research, we investigated how people respond to marketing stimuli when, simultaneously, they may be influenced by external environmental stressors. During uncertain times, such as a pandemic that negatively impacts one's existence, people are likely to experience anxiety-inducing fear and a lowered sense of perceived control. Based on a large body of existing research, people with disturbed perceived control will engage in compensatory behavior, such as seeking experiences that provide structure. We proposed a counterintuitive effect, showing that in some circumstances, people may be inclined to prefer uncertain product experiences. We theorized that the process of meaning-making of mystery marketing stimuli will feel as compensatory behavior to consumers with lowered perceived control. Specifically, the main study tested the proposed interaction between perceived control and meaning making of mystery marketing stimuli. We demonstrated that people with low perceived control would be more likely to choose unknown, unstructured products, compared to people with high perceived control, in the mystery prize condition due to continued meaning integration. Thus, people with low perceived control who are engaged in meaning integration will show a higher preference for uncertain, unstructured products due to the opportunity to continue the meaning integration process associated with the unstructured product options.

Theoretical and Practical Implications

The current research contributes to marketing theory by showing initial support for the influence of sense of perceived control and its interaction with the meaning making of unexpected marketing stimuli on preference for unstructured products. More generally, sense of perceived control may interact with the appraisal of marketing stimuli to influence consumers' buying intention. While the support for compensatory behavior expressed as seeking structured consumption is overwhelming in the literature, we presented evidence and a rationale to explain when and why consumers would prefer unstructured product experiences. We offered initial support for a counterintuitive effect: that people with low perceived control will seek out unstructured experiences such as an uncertain product option. This unexpected effect is explained with the following rationale. When people with low perceived control encounter stimuli that prompt them to engage in meaning making, in the known scenario, they start and quickly conclude the meaning integrating process because they are informed why they are receiving the surprising prize. In the mystery scenario, people engage in continued meaning integration due to missing information (i.e., they would learn the reason for the prize at the end). As people are engaged in continued meaning making in the mystery condition, the process feels as a type of compensatory behavior and could help them restore their lowered perceived control. Subsequently, these people show higher preference for unstructured products because this domain offers another opportunity for continuous meaning making, thus compensatory behavior.

The current research contributes to practice the insight that varying the information in marketing cues can influence consumers' product preference. Particularly, by presenting consumers with marketing stimuli that feature mystery, companies can expect to have higher consumer interest in products that are uncertain, for example, options curated for the consumer. This effect may occur more often during times when the economic and political environment features uncertainty, such as during a pandemic. In such situations, consumers with lowered perceived control who are presented with surprising and mysterious marketing cues may be more likely to choose unknown, uncertain products compared to consumers with high perceived control.

The current research has marketing implications for companies that offer selections of unstructured products curated for consumers, such as subscription boxes (i.e., Stitch Fix, PopSugar, Birchbox). The findings also apply to managing the presentation order and content of marketing stimuli in ad campaigns. For example, if a video program ends with a surprising cliffhanger that prompts continued meaning making, following it would be effective to promote companies that offer products with uncertain aspects such as with mystery aspects. The current research contributes to the advertising industry in general by enhancing the understanding of how to maintain consumers' visual attention to marketing communications by varying the information provided in marketing stimuli and prompting continuous meaning making of the presented information.

Our findings could be interpreted to explain some shifts in consumer behavior during the 2020 pandemic. Namely, as the pandemic started, there was a noticeable and tremendous increase in online shopping. While e-commerce obviously attracted consumers based on convenience, availability, and safety concerns, there could have been another reason contributing to this shift in purchasing habits. Based on the present study, it is possible that consumers were unknowingly attracted by online shopping due to the unstructured aspect of not getting products immediately. For example, when consumers started buying groceries online, they were willing to wait for the delivery to accept the possibility that chosen items, if unavailable, would be replaced with other options or that items may be delayed due to stockouts. It is possible that the uncertain, unstructured aspect of online shopping prompted consumers to engage in meaning-making about the unknown as a type of compensatory behavior. However, more research will be needed in the future to make this connection.

Limitations and Future Research

This research has several limitations. First, the proposed interaction between perceived control and meaning making is tested in only one experiment. There is a need for more testing of the proposed relationship to replicate the results and further explore any boundary conditions.

Another limitation of this research is the use of participants from an online sample. All participants were recruited from Amazon. On one hand, Mturk provides access to a diverse pool of participants who match the American population in terms of age, education, and income more accurately compared to a student sample (Paolacci et al., 2010). Conversely, a challenge with using Mturk participants arises because these participants often multitask while attempting to complete several Mturk tasks simultaneously because of the financial reward. Another potential limitation of this research was the context of the buying intention variable. Participants may not have perceived either of the product options or the context of the decision (i.e., choosing between two selections of snacks) as an opportunity for continued meaning integration.

Future research should address the limitations of the present project by experimenting in a lab setting and by using different outcome variables to explain and predict buying intention for unstructured consumption. Since the present project offers only initial support for the proposed relationships, future research should replicate the tested effects in a different context of meaning integration. Future research should also uncover other factors that may interact with lowered perceived control to result in higher preference for unstructured consumption. Some of these factors may include early childhood development, other simultaneously occurring emotions such as fear, and traits such as curiosity or need for cognition. While this study was conducted before the 2020 pandemic, the findings could be used to explain the consumer behavior of those consumers whose perceived control was disrupted by the environment. Future research should investigate any long-term effects of environmental stressors such as a global pandemic on consumers' decision-making.

References

- Arnold, M. B. (1960). Emotion and personality.
- Blumenthal, A. L. (1977). *The process of cognition*. Prentice Hall/Pearson Education.
- Botti, S., & McGill, A. L. (2006). When choosing is not deciding: The effect of perceived responsibility on satisfaction. *Journal of Consumer Research*, 33(2), 211-219
- Bread. (April 21, 2020). New Survey: COVID-19 Is Changing How and Why We Buy. Consumer Insights & Research. Retrieved on June 16, 2021 from <https://www.breadpayments.com/blog/covid-19-survey/>
- Chisholm, James S., Peter T. Ellison, Jeremy Evans, P. C. Lee, Leslie Sue Lieberman, Zdenek Pavlik, Alan S. Ryan, Elizabeth M. Salter, William A. Stini, & Carol M. Worthman. "Death, hope, and sex: Life-history theory and the development of reproductive strategies [and comments and reply]." *Current anthropology* 34, no. 1 (1993): 1-24.
- Cutright, K. M. (2012). The beauty of boundaries: When and why we seek structure in consumption. *Journal of Consumer Research*, 38(5), 775-790.
- Cutright, K. M., & Samper, A. (2014). Doing it the hard way: How low control drives preferences for high-effort products and services. *Journal of Consumer Research*, 41(3), 730-745.
- Ellis, B. J., Del Giudice, M., Dishion, T. J., Figueredo, A. J., Gray, P., Griskevicius, V., & Wilson, D. S. (2012). The evolutionary basis of risky adolescent behavior: implications for science, policy, and practice. *Developmental psychology*, 48(3), 598.
- Ellis, B. J., Figueredo, A. J., Brumbach, B. H., & Schlomer, G. L. (2009). Fundamental dimensions of environmental risk. *Human Nature*, 20(2), 204-268.

- Foster, M. I., & Keane, M. T. (2015). Why some surprises are more surprising than others: Surprise as a metacognitive sense of explanatory difficulty. *Cognitive psychology*, 81, 74-116.
- Friesen, J. P., Kay, A. C., Eibach, R. P., & Galinsky, A. D. (2014). Seeking structure in social organization: Compensatory control and the psychological advantages of hierarchy. *Journal of Personality and Social Psychology*, 106(4), 590.
- Griskevicius, V., Ackerman, J. M., Cantú, S. M., Delton, A. W., Robertson, T. E., Simpson, J. A., ... & Tybur, J. M. (2013). When the economy falters, do people spend or save? Responses to resource scarcity depend on childhood environments. *Psychological science*, 24(2), 197-205.
- Heine, S. J., Proulx, T., & Vohs, K. D. (2006). The meaning maintenance model: On the coherence of social motivations. *Personality and Social Psychology Review*, 10(2), 88-110.
- Higgins, E. T. (1989). Self-discrepancy theory: What patterns of self-beliefs cause people to suffer? *Advances in experimental social psychology*, 22, 93-136.
- Itti, L., & Baldi, P. F. (2006). Bayesian surprise attracts human attention. In *Advances in neural information processing systems* (pp. 547-554).
- Kay, A. C., Gaucher, D., Napier, J. L., Callan, M. J., & Laurin, K. (2008). God and the government: testing a compensatory control mechanism for the support of external systems. *Journal of personality and social psychology*, 95(1), 18.
- Kay, A. C., Whitson, J. A., Gaucher, D., & Galinsky, A. D. (2009). Compensatory control: Achieving order through the mind, our institutions, and the heavens. *Current Directions in Psychological Science*, 18(5), 264-268.
- Keller, H., Lamm, B., Abels, M., Yovsi, R., Borke, J., Jensen, H., ... & Su, Y. (2006). Cultural models, socialization goals, and parenting ethnotheories: A multicultural analysis. *Journal of Cross-Cultural Psychology*, 37(2), 155-172.
- Kohli, S., Timelin, B., Fabius, V., Veranen, S.M. (2020) How COVID-19 is changing consumer behavior – now and forever. McKinsey & Company. Retrieved on June 16, 2021 from <https://www.mckinsey.com/~media/mckinsey/industries/retail/our%20insights/how%20covid%2019%20is%20changing%20consumer%20behavior%20now%20and%20forever/how-covid-19-is-changing-consumer-behavior-now-and-forever.pdf>
- Lazarus, R. S. (1991). *Emotion and adaptation*. Oxford University Press on Demand.
- Loewenstein, G. (1994), "The Psychology of Curiosity: A Review and Reinterpretation," *Psychological bulletin*, 116 (1), 75-98.
- Maccoby, E. and Martin, J. A. (1983), "Socialization in the Context of the Family: Parent-Child Interaction," *Handbook of Child Psychology*. Vol. 4, Socialization, Personality, and Social Development, ed. Paul H. Mussen, New York: Wiley, 1–101.
- Mandel, N., Rucker, D. D., Levav, J., & Galinsky, A. D. (2017). The compensatory consumer behavior model: How self-discrepancies drive consumer behavior. *Journal of Consumer Psychology*, 27(1), 133-146.
- Maguire, R., Maguire, P., & Keane, M. T. (2011). Making sense of surprise: an investigation of the factors influencing surprise judgments. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 37(1), 176.
- Meyer, W. U., Reisenzein, R., & Schützwohl, A. (1997). Toward a process analysis of emotions: The case of surprise. *Motivation and Emotion*, 21(3), 251-274.
- Mittal, C., & Griskevicius, V. (2014). Sense of control under uncertainty depends on people's childhood environment: A life history theory approach. *Journal of Personality and Social Psychology*, 107(4), 621.
- Mittal, C., Griskevicius, V., Simpson, J. A., Sung, S., & Young, E. S. (2015). Cognitive adaptations to stressful environments: When childhood adversity enhances adult executive function. *Journal of personality and social psychology*, 109(4), 604-621.
- Mittal, C., Griskevicius, V., & Haws, K. L. (2020). From Cradle to Grave: How Childhood and Current Environments Impact Consumers' Subjective Life Expectancy and Decision-Making. *Journal of Consumer Research*.

- Newall, M. & Jackson, C. (2020). Perceived Level of Threat COVID-19 Poses to the U.S. and Individuals Doubles in Less Than a Month. Ipsos. <https://www.ipsos.com/en-us/news-polls/perceived-level-of-threat-covid19-poses-doubles>
- Nisbett, R. E., & Wilson, T. D. (1977). Telling more than we can know: verbal reports on mental processes. *Psychological review*, 84(3), 231.
- Noordewier, M. K., Topolinski, S., & Van Dijk, E. (2016). The temporal dynamics of surprise. *Social and Personality Psychology Compass*, 10(3), 136-149.
- Paolacci, G., Chandler, J., & Ipeirotis, P. G. (2010). Running experiments on amazon mechanical turk.
- Plutchik, R. (1980). Emotion: A psychoevolutionary synthesis. Harpercollins College Division.
- PWC. (2020). Evolving priorities: COVID-19 rapidly reshapes consumer behavior. Retrieved on June 16, 2021 from <https://www.pwc.com/us/en/industries/consumer-markets/library/covid-19-consumer-behavior-survey.html>
- Rutjens, B. T., van Harreveld, F., van der Pligt, J., Kreemers, L. M., & Noordewier, M. K. (2013). Steps, stages, and structure: Finding compensatory order in scientific theories. *Journal of Experimental Psychology: General*, 142(2), 313.
- Scherer, K. R. (2001). Appraisal considered as a process of multilevel sequential checking. *Appraisal processes in emotion: Theory, methods, research*, 92(120), 57.
- Schützwohl, A. (1998). Surprise and schema strength. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 24(5), 1182.
- Skinner, E. A. (1996), "A Guide to Constructs of Control," *Journal of Experimental Social Psychology*, 71 (3), 549–70
- Skinner, E. A., Chapman, M., & Baltes, P. B. (1988). Control, means-ends, and agency beliefs: A new conceptualization and its measurement during childhood. *Journal of personality and social psychology*, 54(1), 117.
- Valenzuela, A., Mellers, B., & Strebel, J. (2010). Pleasurable surprises: A cross-cultural study of consumer responses to unexpected incentives. *Journal of Consumer Research*, 36(5), 792-805.
- VanBergen, N., & Laran, J. (2016). Loss of control and self-regulation: The role of childhood lessons. *Journal of Consumer Research*, 43(4), 534-548.
- Wang, C. and Huang, Y. (2018), "'I Want to Know the Answer! Give Me Fish'n'chips!': The Impact of Curiosity on Indulgent Choice," *Journal of Consumer Research*, 44 (5), 1052-67.
- Wiggin, K. L., Reimann, M., Jain, S. P., & Herr, P. M. (2018). Curiosity Tempts Indulgence. *Journal of Consumer Research*.
- Wikipedia. Ontario Highway 61. https://en.wikipedia.org/wiki/Ontario_Highway_61
- Wilson, T. D., Centerbar, D. B., Kermer, D. A., & Gilbert, D. T. (2005). The pleasures of uncertainty: prolonging positive moods in ways people do not anticipate. *Journal of personality and social psychology*, 88(1), 5.

Appendix A

King's Highway Article – from Wikipedia

All participants in the main study were first presented with a reading and comprehension task. They were given an article from Wikipedia that was featured as "article of the day." The article was about a Canadian highway and its history, as presented below.

"King's Highway 61, commonly referred to as Highway 61 and historically known as the Scott Highway, is a provincially maintained highway in the Canadian province of Ontario. The 61-kilometre (38 mi) route connects the Pigeon River Bridge, where it crosses into the United States and becomes Minnesota State Highway 61, with a junction at Highway 11, Highway 17 and the Harbour Expressway in Thunder Bay. The highway forms part of the Lake Superior Circle Tour.

Crossing the Canada–United States border, the Pigeon River Bridge is 300 miles west of the Sault Ste. Marie International Bridge and 300 miles east of the Fort Frances-International Falls International Bridge and is near a visitor center.

Highway 61 begins at the Ontario-Minnesota border at the Pigeon River; the road continues south to Duluth as State Highway 61 on the American side. It passes the customs station and curves to the north. Passing its former routing along Highway 593, the highway curves eastward to avoid mountains. It zig-zags around a range of mountains, eventually turning northward and passing to the west of Cloud Bay.

The highway continues north for 20 kilometers (10 mi) through Neebing, running between mountain ranges on either side. It rises at Moose Hill, meets Highway 608 and enters one of the few agricultural areas in northwestern Ontario. Shortly thereafter, Highway 61 curves to the east, passing the southern terminus of Highway 130 along the way. It then enters the outskirts of Thunder Bay.

The highway passes Chippewa Road, its former route through Thunder Bay, and returns to its northward orientation. It officially enters the city as it crosses the Kaministiquia River. The highway swerves east at Thunder Bay International Airport as it widens to four lanes then continues north, crossing Arthur Street. North of Arthur Street, the highway is also known as the Thunder Bay Expressway. It continues north for 3 km (1.9 mi) and ends at the Harbour Expressway and Trans-Canada Highway.

The northernmost section in Thunder Bay is a four-lane, undivided expressway. The remainder of Highway 61 is a conventional two-lane highway. Traffic volumes along the southern portion of the highway are generally low, with an annual average daily traffic (AADT) of 1,000 vehicles. This increases progressing north; within Thunder Bay the AADT peaks at 17,200 vehicles. Highway 61 also forms a small portion of the Lake Superior Circle Tour, a tourist route of highways following the shoreline of Lake Superior. To the south, the tour continues along Minnesota State Highway 61; to the north it continues along Highway 17 towards Sault Saint Marie.

The road that would become Highway 61 was first constructed in 1916. The Pigeon River Timber Company had cleared lands surrounding the towns of Port Arthur and Fort William, but no road existed to connect to locations outside. A narrow wilderness trail reached as far as the Pigeon River, and was chosen as the route for the new road. The Department of Mines and Resources agreed to fund the project, and citizens proceeded to lay a new road as far as the river, beginning in 1913. This road was initially known as the "Scott Highway" after lumberman William Scott. On the opposite shore, Cook County and the State of Minnesota constructed a new road north from Grand Marais. The roads were completed by late 1916, but no bridge existed to connect them.

The prize manipulation was presented here. Afterwards, participants continued with the reading and comprehension task.

The Rotary Clubs of Port Arthur and Duluth met to discuss a solution. As an international crossing, any bridge over the river would require federal approval from both governments. Both sides agreed that the approval process would be too slow, and decided to construct the bridge regardless. "The Outlaw" bridge was opened by a travelling motorcade on August 18, 1917, finally permitting travel

between Ontario and Minnesota. To the surprise of the Rotary Clubs, J.E. Whitson, Roads Commissioner of Northern Ontario, and Howard Ferguson, Minister of Lands, Forest and Mines, were present at the opening, and agreed to pay the \$768,000 (\$12.5 million in 2018) bridge cost. The bridge and the Canadian road approaching it fell under the jurisdiction of the Department of Highways (now the Ministry of Transportation) on April 1, 1937, and the Scott Highway became Highway 61 on October 6. The Outlaw was rebuilt as a steel truss structure in 1934 following several accidents.

By 1962, construction was underway to bypass the inland route of the highway as well as the bridge. This bypass opened on November 1, 1963; the American approach was rebuilt along the shore of Lake Superior, and a new bridge constructed over the river 10 km (6.2 mi) to the east. This bridge was opened on May 23, 1964. Highway 61 was realigned as a result; the former route was re-designated as Highway 593 on September 1, 1964.

In 1963, Charles MacNaughton, minister of the Department of Highways, announced plans for the Lakehead Expressway to be built on the western edge of the twin cities of Port Arthur and Fort William (which amalgamated in 1970 to form Thunder Bay). Construction began in the late 1960s and progressed rapidly. Following its completion by late 1970, Highway 61 was rerouted along it as far north as Arthur Street. The former route followed Chippewa Road, turned north on James Street and then east on Frederica Street. From there, it turned north along Ford Street and followed it and Kingsway to Highway 11 and Highway 17 at Arthur Street. This route was renumbered as Highway 61B; it remained in place into the 1990s but was decommissioned by 1999.”

Appendix B

Belgian cookies and chocolate sauce



Kettle cooked chips



Honey maple peanuts



Mystery option

