The Effect of Third Party Procedural Justice Perceptions on Purchase Decisions: The Role of Uncontrolled Marketing Communications

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THE EFFECT OF THIRD PARTY PROCEDURAL JUSTICE PERCEPTIONS ON PURCHASE DECISIONS: THE ROLE OF UNCONTROLLED MARKETING COMMUNICATIONS

by

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ABSTRACT

THE EFFECT OF THIRD PARTY PROCEDURAL JUSTICE PERCEPTIONS ON PURCHASE DECISIONS: THE ROLE OF UNCONTROLLED MARKETING COMMUNICATIONS
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Marketing scholars have long been interested in consumer likelihood to purchase and the antecedents that impact and influence these intentions. Management scholars have concurrently researched, primarily in the workplace, justice and injustice and the influencers and outcomes of these justice or injustice perceptions. This research conducts an online experiment to test the impact of electronic word-of-mouth (eWOM) on third party consumer procedural justice perceptions and consumer’s likelihood to purchase. With the emergence of interactive web platforms, consumers have more places than ever to share their opinions and perceptions of the companies where they shop for goods and services. There has been a power shift with respect to integrated marketing communications from the firm toward the consumer via these new Web 2.0 platforms. Consumer review forums and anti-brand sites are used to create the treatment conditions in this interdisciplinary research. I find that negative eWOM has a significant impact on respondent’s likelihood to purchase. Additionally, negative eWOM also affected study participant’s perceptions of the procedural justice of the firm. Last, the research found that consumer procedural justice perception is a significant predictor of consumer likelihood to purchase. In other words, the study indicates that third parties, unaffiliated
with the firm, are sensitive to how the firm treats its employees, and these consumer perceptions can affect how likely they are to purchase from the firm. The study results provide evidence of the power of eWOM to persuade and influence consumer likelihood to purchase. Furthermore, the results show that consumers have an interest in the fair treatment of employees at the firms where they may make a purchase.
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CHAPTER 1

INTRODUCTION

Consumers are influenced by a variety of variables when making the decision to purchase a particular good or service (Jacoby, Johar, & Morrin, 1998; Szybillo & Jacoby, 1974), and marketing scholars have long been interested in consumer purchase intentions and the antecedents that influence these decisions (Jacoby et al., 1998; Szybillo & Jacoby, 1974; Yan, Ogle, & Hyllegard, 2010; Zaichkowsky, 1991). For example, marketers attempt to influence the purchase decision by engaging in various forms of communication so as to direct the consumer to a particular product or service. In addition, manipulations of the purchasing environment (e.g., sight, sound, smell) are often used in an effort to increase awareness of particular products, services, and brands (Baker, Grewal, & Levy, 1992; Kotler, 1973). Interestingly, while employee interactions with a consumer have been a focus of research with respect to consumer attitudes and satisfaction toward the firm (Bowen, Gilliland, & Folger, 1999; Schneider, 1980), the role of the relationship between the employee and the company and its effects on the consumer’s buying intention has not received the same attention (Konovsky, 2000; Skarlicki & Kulik, 2005).

Two opposing examples portray this suspected relationship between the relationship of the employee and company with a consumer’s intent to purchase. Chick-fil-A is the second largest quick-service chicken restaurant chain in the United States,
with over 1,615 locations and reported annual sales of over $4.1 billion in 2011 (www.chick-fil-a.com). Chick-fil-A also states on the company website that part of the company’s recipe for success is the fact that restaurants are closed on Sundays so that employees can “have an opportunity to rest, spend time with family and friends, and worship if they choose to do so.” The company promotes this employee-company interaction on its billboards, store signage, and company website. While the Chick-fil-A example offers a positive interaction between marketing communications and consumer perceptions of employee-company interactions that are tied to company sales, the large retail chain, Wal-Mart, provides an example of a company in which the opposite perception occurs.

Wal-Mart has been the focus of much criticism by various groups and individuals, with numerous protests and lawsuits against the company’s policies and practices toward its employees (Geller & Wohl, 2012, October 1; Hollenbeck & Zinkhan, 2010). For example, Wake Up Wal-Mart is a campaign group organized by the United Food and Commercial Workers Union (www.ufcw1208.org). This group claims that Wal-Mart offers substandard wages and poor health care benefits to its employees. While one of the largest retailers worldwide, the excellent sales figures are attributed by the firm to the company’s product offerings and low prices. Accusations against the company assert that injustice toward employees has helped Wal-Mart become the world’s largest retailer by enabling the company to undersell the competition and increase firm profit (Greenhouse, 2002). Substandard wages, forced unpaid overtime, lack of affordable health insurance, and worker discrimination have resulted in a strong push by employees
and other activists, via online and offline avenues to drive consumers away from the company (Hollenbeck & Zinkhan, 2010).

Negative electronic word-of-mouth research has differed as to the degree of influence this uncontrolled marketing communication has on consumer purchase intention and its antecedents. Some research has found that any negative electronic word-of-mouth is damaging to the brand (Sonnier, McAlister, & Rutz, 2011). Other researchers have found that some negative electronic word-of-mouth posted in online forums did not negatively affect sales in a significant way, and may have added to the source credibility of the forum (Doh & Hwang, 2009). A focus of the current research is to further examine the influence electronic word-of-mouth may have on consumer likelihood to purchase.

Marketers have given considerable attention to influences on consumer likelihood to purchase. However, there is a paucity of research exploring the expanding interface between a firm’s employees and the consumers of the firm. One reason for this lack of research may be the recent tremendous growth in internet usage and the emergence of the electronic word-of-mouth phenomenon. For example, in 2000, 44.1% of the U.S. population reported that they were internet users. That number grew to 77% in 2010 (http://www.internetworldstats.com/am/us.htm). Additionally, the percentage of U.S. internet users using social networking sites in 2004 was reported to be 11%. By 2011 this figure had grown to 65% (http://www.pewinternet.org/Reports/2011/Search-and-email/Report.aspx). This uncontrolled electronic communication may be influencing consumers, as interested third party stakeholders, and their likelihood to purchase. With the recent explosion of electronic peer-to-peer communications and the subsequent inability of the company to control these communications, a company’s treatment of its
employees, vendors, and customers can rapidly become well known and widespread. Therefore, the second major purpose of this research is to investigate the role of uncontrolled marketing communications in the formation of consumer perceptions of the firm’s fair treatment of their employees.

The existing justice research is frequently conceptualized with the firm or manager as the source of injustice and the employee as the target. However, research has begun to show that third parties care about and will react to a perceived injustice to another in the workplace (Cropanzano, Goldman, & Folger, 2003; Rupp & Bell, 2010). The consumer, as an interested third party stakeholder, may also be affected by reported injustice at a firm where they purchase or plan to purchase goods or services. This research will examine how consumer perceptions of employee (in)justice experiences affect the consumer’s likelihood to purchase.

Research Objectives

As shown in the conceptual model (Appendix, Figure 1), the objectives of this research are twofold. One, the model asserts that uncontrolled marketing communications will have an influence on a consumer’s likelihood to purchase. Two, this relationship is expected to be mediated by the consumer’s perceptions of the justice of the firm. To pursue these research objectives, the following research questions are examined:

RQ1: What is the impact of negative electronic word of mouth on consumer’s purchase intentions?

RQ2: What role do consumer’s perceptions of a firm’s fair treatment of its employees play in the consumer’s purchase intentions?
RQ3: Do electronic word of mouth messages, uncontrolled by the firm, have an impact on consumer perceptions of the fairness of the firm toward its employees?

Marketing Communications

An integrated marketing communication (IMC) program attempts to create a unified message about the firm and/or its product offerings (Schultz & Kitchen, 1997). Traditionally, an IMC program has included such elements as personal selling, public relations, sales promotion, direct mail, sponsorships, and media advertising. All of these IMC components are controlled by the firm. Twenty-first century communication tools, however, are changing the nature of control in the marketer’s communications efforts.

Over the last decade, the United States has experienced a dramatic increase in internet-based technologies and subsequent consumer-to-consumer communications. The result of these developments has been a shift of message control away from traditional senders (the firms) toward the receivers, who in fact may now become creators and senders themselves (Berthon, Pitt, & Campbell, 2008; Breazeale, 2009; Steyn, Wallström, & Pitt, 2010). Fueled by advances in technology, information about goods and services is being carried via platforms and avenues that were not available even a few years ago. Examples of these twenty-first century communication platforms and tools include: social networking sites (e.g., Facebook), photo sharing sites (e.g., Instagram), video sharing sites (e.g., YouTube), business networking sites (e.g., Linkedin), micro blogging sites (e.g., Twitter), online consumer reviews (e.g., Amazon.com), anti-brand sites (e.g., WalMartSucks.org) and electronic mail. Messages and information shared via these channels are commonly referred to as electronic word of mouth or eWOM (Strutton, Taylor, & Thompson, 2011). Furthermore, both offline and online word of
mouth have been shown to have a significant impact on purchase intentions and sales (Chung & Darke, 2006).

The receiver often gives more weight to word of mouth messages, versus company sponsored communications, since word of mouth messages are typically thought of as not being influenced or controlled by the company and because the individual commenting has no commercial self-interest (Cox, Burgess, Sellitto, & Buultjens, 2009; Mangold & Faulds, 2009). Thus, eWOM has evolved as a more trustworthy source of information than company sponsored messages transmitted through the traditional components of IMC (Chou, 2012; Giese, Spangenberg, & Crowley, 1996; Liu, 2006). Due to the relative newness of the phenomenon and the necessary rigor and review required of scholarly research, eWOM is relatively under-researched when compared with traditional word of mouth communications (Chevalier & Mayzlin, 2006; Prendergast, Ko, & Siu Yin, 2010). According to Berthon et al. (2008), eWOM is here to stay and marketing scholars must gain a better understanding of its role in the consumer purchasing process.

Justice

Traditionally, organizational justice has been conceptualized with the individual employee as the target and the supervisors or the firm as the originating source (e.g. Arnold & Spell, 2006; Cobb, Vest, & Hills, 1997). In essence, employee justice has been perceived to be an issue internal to the firm, and justice research has provided support for a deontic response to perceived injustice but generally from the employee perspective. A deontic response is typically triggered when one believes a correct moral course has not been followed (Cropanzano et al., 2003). For example, management scholars have examined the effect that a co-worker’s report of unfair treatment may have on another
employee (Hafer & Begue, 2005). Kray and Lind (2002) found that a harsh injustice directed toward, for example, Employee A led to low procedural justice ratings of that employee’s supervisor from Employee B. These lower ratings occurred even though Employee B was not directly affected by the injustice. These vicarious justice experiences observed by co-workers can have pronounced impacts on procedural justice perceptions within the workplace (Brockner & Greenberg, 1990; Kray & Lind, 2002).

While the concern has historically been with the vicarious justice experience of non-impacted employees, there is also potential for consumers to engage vicariously in the justice-related exchange. This consumer group is a stakeholder group that has received scant attention in the justice literature. According to Taylor (2009), both impacted and non-impacted individuals can receive and resend information quickly, which can result in these vicarious justice experiences spreading rapidly among consumers. Thus, eWOM among consumers, about employee justice within the firm, could have an influence on a consumer’s likelihood to purchase. Interestingly, third-party message recipients are less likely to seek additional information about justice exchanges and will often take the eWOM discourse at face value (Brocato, Peterson, & Crittenden, 2012; Grunig, 1987).

Organization of Study

Scholars have argued that new knowledge is more likely to result from combining existing knowledge across fields of study versus continually drawing from within a single field of study (Colquitt & George, 2011; George, Kotha, & Zheng, 2008), and both marketing and management researchers have encouraged cross-disciplinary research (Crittenden, 2005; Heath & Sitkin, 2001). This research will respond to these entreaties by making an interdisciplinary contribution to both the marketing and management
disciplines. This contribution will come via the study of justice perceptions among a third-party stakeholder group, in this case consumers, as they are influenced by the understudied phenomenon of electronic word of mouth.

This research is organized into five chapters. This first chapter provides the motivation for the research and the research objectives. Chapter Two provides a review of the literature relevant to each of the major constructs presented in the model. The chapter explores in-depth the topics of likelihood to purchase, uncontrolled marketing communications, eWOM effect on likelihood to purchase, justice, and value consciousness. The second chapter includes the research hypotheses and concludes with an operational model of the predicted relationships among these major topics. The third chapter provides an extensive overview of the research methodology employed in the current study. Chapter Four will consist of an analysis of the data and a presentation of the findings. The implications of these findings for theory, practice, and future research will be presented in Chapter Five, along with a discussion of the limitations of the current research.
CHAPTER 2
LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

A central objective of marketing is to influence sales positively by creating or adjusting stimuli. Historically, this has been performed by making modifications to components of the traditional marketing mix (e.g. product, price, place, and promotion). The score card for success or failure is the degree to which sales do in fact vary in response to the stimuli (Axelrod, 1968). Due to the difficulty and impracticality of observing actual purchasing activities, marketers typically use likelihood to purchase or purchase intention measures as proxies for consumer buying behavior. Infosino (1986) explored the relationship between consumer likelihood to purchase and whether the purchase was actually made. This study confirmed previous research showing a positive correlation between likelihood to purchase and purchase behavior. While likelihood to purchase is not a perfect measure of actual purchasing behavior, Infosino (1986) demonstrated empirically that it is a good proxy.

Likelihood To Purchase

Likelihood to purchase studies appear frequently within the marketing literature. The volume of studies over the years serve as an indicator that likelihood to purchase is an important concept within the marketing discipline (Morrison, 1979). An extensive review of the marketing literature resulted in five major categories of influences on the likelihood to purchase as well as a variety of developing areas of influence. These five
major categories were: brand preference, pricing, product experience, atmospherics, and country of origin effects.

Brand Preference

An assessment of similar products will likely lead a consumer to generate preferences for particular brands. Typically, the lowest preference will be attached to the brand with the highest perceived risk to the consumer and the highest preference will be for the brand with the lowest perceived risk (Mitchell & Boustani, 1994). Bauer (1960) introduced the concept of perceived risk in the consumer decision making process, and the evolutionary path in this area has resulted in perceived risk as an underlying phenomenon in the likelihood to purchase literature. In addition to the contribution of risk to the brand preference discussion, attitudes also play a role. Attitude theory suggests that brand preference rankings are similar to the ordering of the attitudes toward the brands. Consumers, when choosing their most preferred brand, are also choosing the brand for which they have the most favorable attitude (Bass, Pessemier, & Lehmann, 1972; Laroche & Brisoux, 1989). Consumer confidence, or degree of assurance that judgement of the brand is accurate, also impacts likelihood to purchase. This confidence can be increased by the level of the consumer’s brand familiarity as well as by direct experience with the brand (Laroche, Kim, & Zhou, 1996).

Early research on brand preference, attitudes, and choice investigated the premise that choice behavior is influenced by perceptions and values of product attributes. The argument posited was that if a person’s attitude is more favorable toward object 1 than it is for object 2, then it is more likely that object 1 will be chosen over object 2 (Bass et al., 1972). In their study of attitudes, brand preference, and choice, Bass et al. (1972) tracked soft drink choices made by a sample of university students and secretaries. Soft drink
purchases were studied by the researchers due to the product’s low cost and its perishability so as to minimize a stockpiling problem, as well as the familiarity afforded by the study subjects due to the product’s status as a routine purchase. Results indicated that when a study respondent indicated a brand as most preferred, in fact the study subject did choose that brand 62.5% of the time. The researchers discovered that a desire for variety can confuse choices, but variety seeking did not outweigh the primary importance of a subject’s attitudes and brand preference when making soft drink choices.

Mitchell and Boustani (1994) examined perceived risk perceptions and the consumer decision making process in their study of breakfast cereal purchases in the United Kingdom. The *a priori* belief was that risk was pervasive throughout the buying process but not equally so. During the consumer decision making process, after consumers evaluate the alternative brands available to them, they will have formed some brand preference(s) of those in their consideration set. Generally, the brand with the least perceived risk for the consumer will also be the most preferable. The research results indicated that pre- and post-purchase risk perceptions are not of equal importance in both purchase periods. A significant risk reducing strategy reported by the study participants was brand of the cereal. Cereal brands are heavily advertised and by choosing a brand that they were familiar with, the consumers sought to reduce their perceived risk. Perceived risk reduction in turn improved the odds of the familiar brand being chosen.

The effect of brand familiarity on consumer likelihood to purchase has been a focus of academic study (Laroche et al., 1996). In a survey of Canadian consumer’s selection of four popular brands of cough and cold syrups, the researchers found that consumer confidence in their brand evaluation was a determinant of their likelihood to purchase. The research also established that a consumer’s confidence toward a brand
may be a result of their experience with that brand. The structural equation model
demonstrated a positive link between brand confidence and likelihood to purchase for all
four of the brands used in the study.

In a recent study of supermarket shopping in India, researchers examined the
factors that consumers reported as influencing purchase decisions (Alvi, Shaikh, &
Jagtap, 2012). In assessing the importance of brand as an influencer of purchase
decisions, consumers living in an urban area of India were surveyed. The survey results
showed that nearly a fourth of respondents gave their highest rating to the brand of the
product as a determinant in the purchase decision. Additionally, most of the consumers
surveyed indicated that they purchased from particular supermarkets because of the brand
name. Highly-educated respondents were more likely to consider the brand of the
supermarket when they made their buying decisions even though store brand influenced
all of the studied segments to a large extent.

Pricing

An examination of the literature reveals that product pricing is also a major
decision variable affecting consumer likelihood to purchase (Chang & Wildt, 1994).
Mainstream economics is described frequently as the study of resources, which are not
unlimited and can be scarce, and how these resources are used among competing
alternatives. The marketing literature contains studies of price as it relates to quality and
value. A consumer’s purchase decision is based on the perception of the value of the
good or service. This value can be represented as the perceived quality of the good or
service, often influenced by brand as noted previously, relative to the perceived monetary
sacrifice that will be necessary in order to obtain it (Rao & Monroe, 1989). In the
services marketing literature, Zeithaml (1988) described consumer value as the perception of what is received for what is given.

Price is inextricably linked to quality and value perceptions. Chang and Wildt (1994) studied, via a lab experiment, the effect of price and quality on perceived value and this value perception on the likelihood to purchase. The researchers found that likelihood to purchase was positively affected by value perceptions, which mediated the influence of perceived quality and price. However, there was also a direct effect between perceived quality and price and likelihood to purchase in addition to the indirect effect that occurred via value perceptions. The results led the researchers to conclude that likelihood to purchase decisions are complex and that there may be other factors affecting the dependent variable that were not included in the model.

Price discounting, though a commonly used tactic, may have an adverse effect on a brand’s quality perception. In an experiment conducted by Grewal et al. (1998) on bicycle purchasing, results revealed that the negative effects of price discounts could be offset by the positive effects of a brand’s quality perception. This finding suggests that the negative effects on quality perceptions may not hold for high quality products (in this case a Cannondale bicycle). One of the more meaningful findings was that 85% of the variation in perceived value could be explained by brand name and price discounts. This indicates the importance of these variables among the many variables that impact value perceptions which have been established in the literature to be antecedents to likelihood to purchase.

It has been noted in the marketing literature that frequent price discounting can result in consumers adjusting their price expectations and may create an aversion to paying the normal non-discounted price when the promotion ends. Kwon and Schumann
(2001) examined a construct referred to as expected future price (EFP). The goal of the research was to explore how a consumer’s expected future price might affect current decisions to purchase. An experiment using a computer monitor as the object of the purchase decision was undertaken with an undergraduate student sample. The results found that EFP did influence both perceived acquisition value and likelihood to purchase. The research results also indicated that if a consumer is exposed to credible information that there will be a decrease in the future price, the value of the acquisition in the future may increase in the consumer’s mind.

As previously stated, price often carries with it a perception of quality. Therefore, marketers have been interested in how price promotion strategies can be used to positively influence likelihood to purchase without diminishing quality perceptions. If a price reduction can be offered that does not affect quality perceptions, the result should be a higher value perception and increased likelihood to purchase on the part of the consumer. For example, couponing has been investigated as a way to price promote without diminishing consumer perceptions of quality. Chen, Monroe, and Lou (1998) studied couponing versus other discount promotions utilizing an experiment with undergraduate students as subjects. The researchers found that test subjects were more prone to alter their likelihood to purchase the promoted product in the coupon conditions versus the discount condition. It was the authors’ opinion that one of the primary reasons for this result was that a reduction in price, as a result of coupon usage, did not signal a decline in the quality of the product. To a preferred buyer who did receive a coupon, the coupon resulted in a feeling of exclusiveness and the feeling that they were getting a good deal because some people were paying full price.
Research by Shor and Oliver (2006) investigated online couponing, which is becoming popular as technology dispersion and use becomes more commonplace. The authors’ primary interest was in studying the widely held assumption that consumers who have a higher willingness to pay are expected to purchase the product in question at any given price. Therefore, coupons should be used to encourage those with a lower willingness to pay to purchase the product. Targeting that market segment with a lower willingness to pay via a coupon promotion should result in higher profitability for the firm. However, with the advent of coupon repository web sites (e.g., RetailMeNot.com), the ability for the firm to control who does and who does not receive a coupon has been diminished. Therefore, the authors questioned whether price discrimination on the basis of coupons was having the desired effect in the online environment. Using a mix of MBA students, survey panelists, respondents to a Google ad, and respondents who utilized a survey link on a number of websites, Shor and Oliver (2006) studied the reactions of subjects that were prompted to enter a coupon code at checkout and those that did not receive this prompt. The study found that consumers without coupons were less likely to complete their purchase when confronted by a prompt to enter a coupon code. This was reasoned to be the result of a feeling of price discrimination for those without coupons. Therefore, the study found support for the notion that traditional couponing may not be effective in the digital marketplace that is populated by more educated and tech savvy younger consumers. The authors concluded that these educated users may be obtaining coupons because they know how to find them, no matter what their price sensitivity. This means that the end result of more sales, and thus more profits, may not be able to be accomplished via online couponing like it is with more traditional couponing and therefore, other avenues need to be explored.
Product Experience

Laroche et al. (1996) demonstrated that prior brand experience affects consumer confidence in a brand. Recent research seeking a better understanding of what influences a college age sample population to make purchases via electronic commerce supports earlier research on consumer experience and likelihood to purchase (Dillon & Reif, 2004). In a study of college students and the likelihood to purchase textbooks online versus in a brick and mortar book store, Dillon and Reif (2004) found support for the influence of experience on likelihood to purchase. The research results showed that those respondents who reported that they were more experienced computer users, possessed a more positive attitude toward purchasing a textbook using an e-commerce site. The only characteristic that predicted an e-commerce purchase of a textbook was previous internet purchase. Furthermore, as the students reported increased levels of computer skills, concerns regarding price and quality became more prominent than did worries about customer service. The research showed that as consumers continue to make e-commerce purchases their experience increases and subsequently their likelihood to purchase via the internet increases as well.

In a recent study of the likelihood to purchase rental car insurance, Dean (2010) used upper level undergraduate students for a survey incorporating a scenario of attending a job interview in an unfamiliar city where they would need to rent a car. Experienced renters reported that the odds of an accident involving them and their car were not likely, and they were subsequently less likely to purchase the rental insurance. Prior rental car experience was shown to be a significant predictor of the rental car accident insurance. Prior rental car experience significantly influenced and diminished likelihood to purchase the collision and liability offered by the rental car company. The
author stated that experience had a “significant, unique, and predictive ability for insurance purchase” (Dean, 2010, p. 222).

Atmospherics

Atmospherics, a concept introduced by Kotler (1973), is described as the informed designing of space to create particular reactions in buyers. Much of the academic study of atmospherics has revolved around the study of brick and mortar retailing (Baker et al., 1992; Turley & Milliman, 2000). The extant literature has typically divided the atmospheric elements into five categories. These categories are the exterior of the store, the interior of the store, store layout and design, the point of purchase and store decoration, with the fifth category being human variables (Berman & Evans, 1995; Turley & Milliman, 2000).

A consumer’s first impression of a retail store is often the location’s exterior. The exterior’s effect on consumers has received some attention in the marketing literature over the years (Baker, Parasuraman, Grewal, & Voss, 2002; Turley & Milliman, 2000). One of these studies examined the tangible cues of physical office surroundings (e.g., parking and location) for physician’s offices as surrogates for patient’s judgements of the physician’s intangible product (Pinto & Leonidas, 1994). The researchers found support for the proposition that these external variables did have an influence on the behavior of the consumers (patients).

Several studies dealing with interior variables appear in the existing marketing, psychology, and consumer behavior literatures (Turley & Milliman, 2000). This category includes variables such as flooring, lighting, scents, music, temperature, cleanliness, and colors. The studies of interior variables indicate that perceptions of store interiors do influence time spent in the location and subsequently sales (Darden, Erdem, & Darden,
Researchers have recently shown interest in colors and scents (or aroma) as they affect consumer buying behavior.

In a series of experiments, Bellizzi and Hite (1992) studied the effect of red and blue color treatments on mood creation and buyer responses. The subjects in one study were 70 adult women who were members of a local Parent Teacher Association. The results showed that the blue display produced higher purchase rates for televisions versus the red display. However, the amount of time spent in the shopping environment was not affected by the color treatment. The second study used 170 undergraduate marketing students in a retail furniture shopping experiment. Students in the blue environment communicated a greater intention to shop, browse, and most importantly to purchase in the imitation store. The results of both experiments showed more positive reactions to blue as opposed to red.

Extending the prior atmospherics work that had as a primary focus the study of the effect of one variable on buyer behavior, Fiore et al. (2000) studied product display, fragrancing, and experience. Additionally, rather than studying fragrance as a binary variable, fragrance or no fragrance, the researchers studied whether an appropriate fragrance would affect the buyers’ behaviors. The experiment involved 145 female university students assessing the purchase of a sleepwear product. Potpopurri was used to create the fragrancing conditions. The findings showed that the product display by itself did not boost the participant’s likelihood to purchase. Additionally, the most significant effect occurred when the product was featured in a display and an appropriate fragrance was being used. It was noted that past studies focused on the odor that originated with the product being studied. This study suggests that appropriate
fragrances introduced into the purchasing environment can have a positive effect on consumer behavior.

Store layout and design with respect to conventional retailing includes variables like aisles, service space, floor merchandise space, and flow of shopping traffic. These variables have been shown to impact traditional in-store shoppers and their likelihood to purchase (Baker, Grewal, & Levy, 1993). Smith and Burns (1996) used a field experiment to study what they termed “power aisles.” The results indicated that fewer items in larger quantities within a warehouse grocery store “power aisle” conveyed a message of lower prices to the consumer. In two experiments, the effects of familiarity with the store environment and time constraints were studied (Iyer, 1989; Park, Iyer, & Smith, 1989). In these studies, unplanned purchases were related to the buyer’s knowledge of the store and time pressure. More specifically, unplanned purchases were higher when there was no time pressure experienced by the consumer.

Signs, product displays, and decorations are typically categorized within the point of purchase and decoration category. Many of these studies concern themselves with shelf space (Turley & Milliman, 2000). Shelf space is the amount of space allotted to a product, generally by the retailer, as well as the location of that space both in the store and within an aisle or department. The literature shows mixed results when studying the effects of shelf space on sales (Doyle & Gidengil, 1977). Research on point of purchase displays, on the other hand, shows an increase in sales across different retail environments (Gagnon & Osterhaus, 1985). Patton (1981) made a contribution to the literature with a study on in-store signage. The study found that with products of equivalent quality, consumers chose the brands that supplied the most information. Many of the more recent studies addressing store layout and design have concerned themselves
with virtual stores (Eroglu, Machleit, & Davis, 2003; Griffith, 2005; Vrechopoulos, O’Keefe, Doukidis, & Siomkos, 2004). These studies have frequently concentrated on the interface between online consumers and a virtual store. This turn toward the study of virtual stores and shopping is almost certainly due to the recent explosion of internet usage and online shopping.

The fifth category of atmospherics research involves human variables. This category includes the influence of other shoppers and the influence of retail employees on consumer shopping behavior (Turley & Milliman, 2000). Crowding (consumer response to human density and restricted movement), both perceived and actual, has received a significant amount of attention by researchers (Baker & Wakefield, 2012). Research has shown that crowding has negative effects on patronage intentions, shopping satisfaction, and number of purchases (Machleit, Eroglu, & Mantel, 2000; Perdikaki, Kesavan, & Swaminathan, 2012). The other sub classification of human variables involves the appearance of the employees. Recent research investigated the effects of appropriate versus inappropriate dress within a banking context (Shao, Baker, & Wagner, 2004). The experiment used firm level service quality expectations and likelihood to purchase as dependent variables. The research indicated that appropriately dressed contact personnel led to increased expectations of the firm’s service quality. This expectation was stronger for the female participants in the study than it was for the males. The authors judged that the results indicated that females are more sensitive to dress cues than are males. The effects of employee dress on service quality and likelihood to purchase played a more significant role when subjects were not as personally involved in their investment decision making.
Country of Origin

The use of country-of-origin (COO) as an information cue in consumer decision making has been a focus of study for marketing practitioners and academics for more than 40 years. Schooler (1965) is credited with being the first to empirically study the country-of-origin effect (Peterson & Jolibert, 1995; Verlegh & Steenkamp, 1999). Schooler found considerable disparity in product evaluations of products that were the same in every respect with the exception of the country specified on a “made in (name of country)” label. Most of the studies following the work of Schooler examined the COO effect using the single extrinsic cue of “made in (name of country)”. Bilkey and Nes (1982) concluded in their review of the literature that COO does influence consumer perceptions. However, they suggested that there may be multiple cues influencing buyer perceptions and the authors encouraged the study of these cues in future research.

In their meta-analysis, Verlegh and Steenkamp (1999) assessed the magnitude of COO effects but went further in a search for explanations for the COO effect. Their results indicated that COO effects are more complex than can be accurately assessed by single-cue designs. COO effect can have several different aspects whose boundaries can be nebulous. While the authors agreed with earlier scholars that COO effect is a significant factor in product evaluations, they asserted that results from single-cue designs should be viewed with caution. Multiple-cue designs were encouraged for future research due in part to the growing nature of multi-national firms designing and manufacturing in different countries, the presence of pressures to “buy domestic”, and consumer beliefs about the characteristics of the COO.
Developing Areas

Two of the newer areas of study concerning likelihood to purchase are sustainability and the ethics of covert (or stealth) marketing. While these areas are comparatively underresearched as compared to other categories of influencers (e.g., brand preference and pricing), there has been some recent research in these areas that should be included in a review of the likelihood to purchase literature.

Regarding sustainability, Hustvedt and Dickson (2009) published what they state is the first study to examine the organic apparel consumer and their motivations to purchase organic apparel. The study lacks generalizability due to the fact that the authors surveyed individuals from a mailing list of health and natural food consumers. However, being a developing area, some insights into the likelihood to purchase organic cotton apparel in particular and “green” products in general makes a contribution to the literature. The study showed that the “organic” consumers in the study were energized by their beliefs about the positive outcomes of the purchase. These consumers were not only excited about the outcomes for themselves personally, but also for the organic industry as well as the environment. The authors contend that, even though organic apparel does not generally make health claims, the atmosphere of health associated with organic foods appears to also benefit organic apparel likelihood to purchase. Additionally, the results indicated that the respondent’s motivations to purchase had as much to do with supporting organic cotton farmers as it did with supporting stores that carried organic apparel. Overall, however, the study of the consumer who is categorized as interested in “green” or “sustainable” products is still in its infancy (Allen & Kovach, 2000).
Technology continues to advance and the users of the internet and other media outlets have become more savvy and connected. Marketers are seeking new ways of having their messages heard through the increasing advertising clutter while not annoying the intended recipients (Cho & Cheon, 2004). One method marketers are attempting to utilize is what has been termed stealth or covert marketing (Magnini, 2011). Covert marketing attempts to disguise firm generated marketing communications. Additionally, in an online environment, covert marketing practices can include the collection of information that is unknown to the consumer (Petty & Andrews, 2008; Wei, Fischer, & Main, 2008). Research studying the effects of covert marketing was recently performed via a scenario based online survey (Milne, Rohm, & Bahl, 2009). The survey participants were selected from an online panel such that the participants would be reflective of the United States online population. Each scenario involved companies and the use of online communities for marketing purposes. The researchers found that knowledge of the use of online covert marketing reduced the respondent’s likelihood to purchase by almost 30%. Additionally, when it was not disclosed that the covert marketing being used was for personal data collection, trust in the company was reduced. The research results also indicated that consumer reactions were not necessarily dependent on the age of the consumer. In conclusion, the authors note that their findings should serve as a note of caution to firms using covert marketing tactics. That is, once the test subjects learned of the practice, there was an increase in respondent cynicism, less trust in the company, and possible damage to the firm – consumer relationship.

This section has provided a review of the effects brand preference, pricing, product experience, atmospherics, and country of origin have on consumer likelihood to purchase. Furthermore, marketing scholars are researching some new and developing
areas within the likelihood to purchase literature and those were discussed as well. As technology grows and develops, the communication platforms spawned from these technological advancements grows as well. These new ways to communicate have created more channels for consumers to share information outside of the firm’s direct control. Research of uncontrolled marketing communication, and its impact on consumer likelihood to purchase, will be reviewed in the next section.

Uncontrolled Marketing Communications

Traditionally, communicating with both current and future customers has been viewed as something that the company does unilaterally, independent of the consumer. In general, this was accomplished by the use of paid advertising in broadcast and print media (Yan et al., 2010). Yet, research has indicated that there is a growing cynicism on the part of consumers toward company sponsored advertising (Balasubramanian, Karrh, & Patwardhan, 2006; Petty & Andrews, 2008). This consumer skepticism is due in part to source credibility that is the perceived bias of the messenger (i.e., the firm). The consumer typically assumes that the message is being controlled by the firm, and the firm has a commercial self-interest in the information that is relayed. Some firms employ methods within their controlled marketing communication program in an attempt to boost trust in the source, and therefore the message credibility. This may involve the incorporation of famous or expert endorsers in the ads or attribution of the ad to a third party (Wiener & Mowen, 1986). Information about a firm’s product and service offerings can and does reach the marketplace via other avenues that are out of the firm’s complete control. In the current research, these uncontrolled marketing communications will be defined as those communications over which the company has little or no control.
A one-to-one discussion between neighbors can transmit information about the marketplace between consumers. This method of communication is referred to in the literature as traditional word-of-mouth (Cheema & Kaikati, 2010). Word-of-mouth communication generally occurs between private parties outside of the firm’s sphere of influence, thus making this mode of communication an influential force in the marketplace (Chung & Darke, 2006). Day (1971) reported that word-of-mouth was nine times as effective as advertising at transforming adverse or neutral predispositions into positive attitudes. He went on to state that favorable word-of-mouth may be the ultimate product success factor.

Just as positive word-of-mouth messages have a strong positive influence on consumer perceptions of the good or service being referenced, negative word-of-mouth may be just as influential on consumer perceptions and buying behavior. Scholars have differed on the actual effect of negative word-of-mouth on brand evaluations. While one set of researchers found that strong and convincing negative word-of-mouth can have a negative effect on brand evaluations (Laczniak, DeCarlo, & Ramaswami, 2001), Doh and Hwang (2009) found that a limited quantity of negative word-of-mouth messages among a much larger amount of positive word-of-mouth was not decisively harmful. In a study of the effect of word-of-mouth on book sales, by way of consumer reviews, Chevalier and Mayzlin (2006) found that the impact of negative reviews on book sales was greater than for positive reviews. Scholars generally agree that word-of-mouth messages are an important and significant form of uncontrolled marketing communication, and that importance has only grown with the emergence and growth of Web 2.0 platforms.
In the past several years, traditional word-of-mouth information dissemination has been accelerated due to rapid technological developments, especially as these developments have improved and strengthened the internet. In a Web 2.0 world of interactive web usage word-of-mouth messages are no longer shared by one person to another person or a small group of people. Both positive and negative word-of-mouth messages can be shared with the world in a short amount of time and relatively cost free. Word-of-mouth messages shared this way are commonly referred to as electronic word-of-mouth or eWOM.

eWOM

The 21st century is experiencing a sizeable communications wave, triggered in large part by the internet and interactive web platforms like social media networks. These advances have revolutionized and significantly changed the way consumers receive and use marketing communications (Mangold & Faulds, 2009). The interactive nature of modern marketing communications presents challenges as well as opportunities for practitioners in the marketing arena (Swain, 2005). In particular, consumer generated content has emerged as a phenomenon of interest among both scholars and practitioners of management, marketing, and communications. Consumer generated content is a relatively recent source of online information that is created, introduced, distributed and used by consumers to inform and perhaps persuade each other about products, services, and brands (Campbell, Pitt, Parent, & Berthon, 2011a).

eWOM Effect on Likelihood to Purchase

The marketing literature has recently begun to explore the role of eWOM and its impact on consumer choices and likelihood to purchase. Two areas of eWOM will be reviewed below. These are the online recommendation and anti-brand (sometimes
referred to as anti-consumption or corporate hate) websites. After a discussion of these two areas, some additional related eWOM literature will be reviewed.

Online recommendation.

One avenue of eWOM that has received scholarly attention is the online recommendation. Senecal and Nantel (2004), using a sample of 487 subjects, conducted an experiment to assess whether consumers were influenced by online recommendations as they made product choices. The results indicated that consumers were influenced by online recommendations as they made online product choices, however, all recommendations were not treated equally. Recommendations from a recommender system, whether represented as being provided by a team of experts or an automated analysis of their questionnaire answers, were the most influential on consumer product choices. The key finding of this research was that the consumers paid more attention to the recommendation source than to the type of website where the recommendation appeared. The authors suggested that, based on these findings, a recommendation appearing on Amazon.com may be as effective as a recommendation appearing on the Consumer Reports website.

Two recent studies examined the effect of online consumer reviews and their impact on movie box office receipts (Chintagunta, Gopinath, & Venkataraman, 2010; Liu, 2006). The eWOM data for both studies were collected from the Yahoo Movies message board. In the first study, Liu found that eWOM was more of a complement to other information sources rather than a substitute. Additionally, the volume of reviews, rather than the valence, appeared to have the most noteworthy explanatory power for box office revenue. Consumers may post comments about upcoming movies before experiencing the product first hand thus increasing the volume but without rating the
films. This creates buzz prior to the opening of a film and results in increased revenue at the theater box office. In an extension of Liu’s study, other researchers (Chintagunta et al., 2010) used local geographic box office data rather than national level data. The goal of the 2010 research was to study the influence of eWOM and its influence on ticket sales for a sequentially released product. Unlike Liu in 2006, Chintagunta et al. found that the valence of the online eWOM, which was defined as mean user ratings in both studies, had a considerable and affirmative impact on box office revenue.

Chevalier and Mayzlin (2006) assessed the impact of online consumer reviews on book sales from two online booksellers (Amazon and Barnes & Noble). The authors found that word-of-mouth did affect consumer purchasing behavior on these two internet retail sites. However, the results did not show that the two retailers benefitted from providing these consumer reviews on their sites. The researchers contend that the reviews may only be moving sales around, across books, within the same site. Additionally, the data demonstrated that new favorable reviews at one of the sites resulted in a sales increase for that book at that site. The results of this study also showed that a negative review was more powerful in decreasing book sales that a positive review was in increasing sales. This last finding has been questioned in other research concerning online reviews (Doh & Hwang, 2009). Using an experimental website created for the purposes of the study, 143 subjects from three South Korean universities participated in a study to assess how consumers evaluated eWOM messages about products and what subsequent effects the appraisals had on likelihood to purchase (Doh & Hwang, 2009). The authors found that 97.9% of the respondents stated that they usually read consumer reviews before making an online purchase. The respondents indicated that they read, on average, nearly 14 reviews prior to their purchase and they
rated consumer reviews as having high credibility. The results of the study indicated that a set of all positive eWOM messages may not be necessary to improve the consumer’s attitude toward the product. A few negative messages within a majority of positive messages did not critically damage consumer attitude toward the product and its purchase. This finding differs from Chevalier and Mayzlin’s (2006) earlier work. Doh & Hwang (2009) reasoned that consumers may question the credibility of a site that does not report any negative messages about a product, thus damaging its source credibility which is a fundamental strength of eWOM.

In a study investigating how the level of involvement with a product moderates the relationship between an online consumer review and the purchasing decision, Park, Lee, and Han (2007) conducted an experiment with 352 college students as study subjects. The independent variables were online consumer reviews and involvement with the product with likelihood to purchase as the dependent variable. Three major findings were reported. First, the consumer online review quality had a positive effect on consumer likelihood to purchase. Second, likelihood to purchase increased along with the number (volume) of reviews. Third, low involvement consumers were affected by the quantity of reviews versus the quality, while high involvement consumers were affected by both. This last finding provides support for the idea that a high number of reviews may serve a signaling purpose for consumers indicating that the product is popular. Therefore, without bothering to read all of the reviews, one could make a low involvement assessment and a quicker judgment based on the number of reviews that have been posted.

Prendergast, Ko, and Yuen (2010) were concerned with the impact of an online forum’s persuasiveness on likelihood to purchase. Building on prior scholarly work, the
authors investigated how similarity between online forum topics and a user’s interest impacted the forum’s persuasiveness. The results of the research showed that, much like offline WOM, similarity between online forum topics and consumer interests was directly related to likelihood to purchase. Attitude towards a forum also had a direct effect on likelihood to purchase. The research results indicated that there was a direct relationship between products discussed on online forums and consumer’s likelihood to purchase those products. The researchers asserted that eWOM is likely a long term phenomenon and should be a subject of further study.

E WOM introduces new research opportunities for marketing scholars. According to Trusov, Bucklin, and Pauwels (2009), empirical evidence correlating eWOM to firm performance is limited and thus an opportunity for further study. Early research in this area focused on online ratings collected from online forums (Chintagunta et al., 2010; Liu, 2006). Sonnier, McAlister, and Rutz (2011) contributed to the eWOM to firm performance research by using web crawler technology that incorporated automated sentiment analysis in a study of the effect of online ratings on sales revenue. Their research used proprietary technology to search for positive, negative, and neutral online communications. The data consisted of counts of online comments concerning a firm, collected daily, for a seven month period in 2007. The cooperating firm provided the researchers with sales and product launch data. The results showed that online communications, beyond those captured by product ratings and reviews, had an effect on firm sales. Sonnier et al. (2011) found that both positive and neutral comments provided positive results in revenue whereas negative comments resulted in an 11% decrease in firm revenues. Based on these results, the authors suggest that firms should seek to become more engaged in the process of eWOM. However, the authors caution that this
should be measured against too much involvement, which would diminish the source credibility of the forum.

Anti-branding web sites.

Today’s aggrieved consumers have access to public forums where they can engage with others in negative word-of-mouth communications about the firm (Krishnamurthy & Kucuk, 2009). Encouraging anti-consumption and growing in number and influence, these web sites are frequently referred to as anti-brand sites. As a testament to the influence of anti-brand sites, Priceline.com bought the domain name pricelinesucks.com before the company started operations (Harrison-Walker, 2001). In an examination of anti-brand sites, Bailey (2004) indicated that employees and former employees are among those who participate in opinion sharing on these sites. Therefore, consumers who visit such sites not only receive fellow consumer opinions but also opinions from discontented employees. To date, there is not an abundance of literature pertaining specifically to anti-brand sites.

Harrison-Walker (2001) performed a content analysis of complaints posted to the anti-United Airlines website, “Untied.” Six months of data, resulting in 551 individual complaints, were analyzed by the author. The top reasons contributing to consumer complaints were employee rudeness, employee incompetence, misinformation from employees, and poor baggage handling – actions that are all within the firm’s control. Over half of the complaining consumers indicated that they had lodged complaints before leaving the airport. Almost a third of the web site complaints had also been reported to the company via telephone. The author also found that of the 447 complaints filed outside of the “Untied” complaint form, only 8.5% received responses. Eleven of over 500 consumers reported that they had received a letter from United, while another five
had received emails. Of those complainers whose gender could be ascertained, the majority were males. More than 81% of the complainers disclosed their identity willingly. The results indicated that United Airlines’ customers easily located the anti-United site and voluntarily posted negative word-of-mouth for public consumption.

The major aims of Bailey’s (2004) research into anti-branding websites were to determine the extent to which consumers are aware that they exist and to assess what impact these sites have on their behavior. The study subjects were 150 undergraduate students. The results of the survey indicated that only half of the respondents were aware of anti-brand sites and only a quarter of the total sample had ever visited one of these sites. However, once the survey participants were aware of the anti-brand site’s existence, primarily by social influences like word-of-mouth from family and friends, the participants were apt to visit the sites and read the comments. Even if they did not complain, the respondents indicated that they did read the comments available on the site and their exposure to the site and the comments did negatively affect their perceptions of the brand or the firm.

The concept of Double Jeopardy in marketing theory depicts a scenario where strong brands have advantages over small or weaker brands in number of consumers and consumer brand loyalty. The smaller or weaker brand is proposed to be penalized twice. Once for being smaller with fewer buyers, and again because its fewer buyers also buy the brand somewhat less loyally (Ehrenberg, Goodhardt, & Barwise, 1990). Kucuk (2008) introduced a concept referred to as Negative Double Jeopardy in a study of anti-brand sites. The contention was that strong valuable brands may attract more anti-brand interest than less valuable brands, thus the reverse effects of Double Jeopardy.
Kucuk (2008) used *Business Week*’s Top 100 Brands List to arrive at the value of a brand. Additionally, the study compiled information on how persistently brands remained in the top 100 listing and termed it “brand consistency.” The results showed that when a brand had a high value ranking, as well as high consistency in the *Business Week* listing, then there was an increase in anti-brand sites directed at that brand. The research demonstrated Negative Double Jeopardy effects. That is, the most valuable brands were being targeted sometimes by several anti-brand sites while the less valuable brands were targeted less frequently, or not targeted at all.

Research conducted by Krishnamurthy and Kucuk (2009) studied not only the antecedents of anti-branding but also the outcomes. Similar to the previous research of Kucuk (2008), study one of this research was interested in brand value and the likelihood of the existence of anti-brand sites targeting these brands. Additionally, the authors studied the effect of anti-brand sites on brand value. The research supported earlier findings showing that strong brands attract a disproportionate amount of anti-brand site attention. They also found that anti-brand sites negatively affect brand value. Study two investigated the use of language among the anti-brand sites and how it might affect brand value. For this study, the authors concentrated on brands with more than two anti-brand sites. A content analysis was conducted, and three communication patterns emerged: (1) market speech occurred when market related expertise was used to criticize the brand in question, (2) ideological speech incorporated personal or partisan attacks, and (3) transactional speech focused on transaction related failures. Market speech was the most commonly used of the three and correlated significantly with brand value.

In a related study, Lee and Cude (2012) focused on the choice of complaint channels. Using an online experimental design with 511 undergraduate students, the
authors investigated complaint channels in both online and offline environments and what might influence a test subject to choose one method over another. The respondents were asked to rate the likelihood that they would choose 15 complaint options provided to them by the researchers. The findings showed that online purchasers were more likely than offline purchasers to post a complaint to an anti-brand site aimed at the firm in the scenario. Additionally, in an online purchase environment, the respondent’s choice of an online complaint channel was magnified by the level of dissatisfaction with the purchase.

The extant research concerning anti-brand sites, though limited, provides some insights into this relatively new channel of eWOM. Namely, these sites are becoming more prevalent as the internet continues to develop and mature and they can be located using common internet search engines. One survey found that anti-brand sites grew from 550 at the end of 1997 to over 10,500 by the end of 2007 (www.mi2g.net/cgi/mi2g/frameset.php?pageid=http%3A//www.mi2g.net/cgi/mi2g/press/021204.php). Furthermore, if the presence of an anti-brand site is made known to a consumer, research shows that the consumer will visit the site and absorb some or all of its content.

In addition to the online recommendation and anti-brand website eWOM literature previously reviewed, other related eWOM research appears in the literature and merits mentioning. Specifically eWOM’s relationship with firm sponsored advertising and customer-to-customer (C2C) exchanges and their influence on consumer purchasing will be discussed. In an attempt to better understand both offline WOM and eWOM and the relationship with advertising, Graham and Havlena (2007) analyzed data from 35 brands in five product categories. When the authors added eWOM to advertising in their nested regression model, eWOM greatly improved the model for the auto and retail
categories. Examination of the findings indicated that eWOM helped to generate offline brand advocacy. Overall, results showed that there was a relationship between advertising and eWOM indicating that, at least in the auto and retail categories, the two appear to work together to influence consumer purchase decisions.

Research conducted in 2005 looked at a specific type of eWOM, namely a customer-to-customer (C2C) know-how exchange (Gruen, Osmonbekov, & Czaplewski, 2006). A know-how-exchange is a place where individuals can interact and share information. This information may serve to increase the individual’s knowledge about a product and subsequently improve the use and operation of the product. The authors examined the effect of a C2C know-how exchange on an antecedent of likelihood to purchase, namely consumer value perception (Gruen et al., 2006). The focus of the research was how C2C exchanges might affect value perceptions. The reasoning was that consumers using the exchanges might be able to realize the full potential of the product better than they would have otherwise. The authors collected data from the Internet user forum of a computer software firm. The study found that the C2C know-how exchange positively affected the value of the firm’s product and the consumer’s future likelihood to purchase. The research demonstrated a direct benefit of eWOM for the firm. Additionally, the study provided support for the belief that value can be derived from interactions of consumers as well as from the firm directly.

Existing research and related literature have shown that positive word-of-mouth messages can create positive consumer attitudes more effectively than advertising. Yet, there is some disagreement as to the effect of negative word-of-mouth messages appearing via online recommendation forums and anti-brand websites. Some have argued that strong negative word-of-mouth messages can have a negative effect on brand
or firm assessments (Bailey, 2004; Chevalier & Mayzlin, 2006; Sonnier et al., 2011). Other researchers posit that a small number of negative messages, within a larger body of positive messages, is not decisively harmful (Doh & Hwang, 2009).

The current research seeks to contribute to the literature on eWOM by measuring the effects of negative eWOM on likelihood to purchase. This research will use a fictionalized consumer review forum in conjunction with a fictionalized anti-brand website to create the negative eWOM condition. Therefore, the first hypothesis of this research is as follows:

*Hypothesis 1: Negative eWOM messages, conveyed via online consumer review sites and anti-brand sites, will be negatively related to consumer likelihood to purchase.*

Organizational Justice

Equity Theory

The concept of organizational justice has its roots in Adams’ Equity Theory (Adams, 1966). Adams builds his theory, in part, on previous work by Stouffer et al. (1949) and their introduction of the concept of relative deprivation, and Festinger’s (1957) theory of cognitive dissonance. The concept of relative deprivation (Stouffer et al., 1949) is illustrated with an example of higher educated soldiers not being as content with their positions as were soldiers who were less educated. This occurred even though more highly educated soldiers had better opportunities to advance in the Army than less educated soldiers. The assumption was that the more highly educated soldiers aspired to higher level jobs and status than the lesser educated soldiers and therefore felt comparatively deprived which resulted in less satisfaction with their positions. Relative deprivation can be described as the discrepancy one feels between their legitimate
expectations and their present reality. Adams concluded that the dissatisfaction was a response to a feeling of injustice. Additionally, he concluded that a process of comparing is innate to the development of expectations.

Adams also cites Homans’ (1961) work on distributive justice in which Homans describes distributive justice as an exchange relationship where the profits of each party to the exchange are proportional to their investments. When an inequity exists between these proportions, feelings of injustice will be present. The exchange partner who has the lower ratio will feel relative deprivation. In the case of an organization, the exchange partners can be receiving their rewards from a third party employer. Each employee will then compare his/her ratio of rewards to investments to the other employees, and will have an expectation that the employer will treat him fairly such that the ratios are equalized.

Patchen (1961), incorporating Festinger’s (1957) cognitive dissonance theory, believed that when such an inequality perception exists between the ratios of two employees, cognitive dissonance is experienced. According to cognitive dissonance theory, if an individual possesses two cognitions that are psychologically in conflict, he/she experiences dissonance (psychological tension). This mental disagreement, by being distasteful to the individual, will cause the individual to attempt to lessen the dissonance. At its core, cognitive dissonance theory deals with how people attempt to make sense of their beliefs, environment, and behavior (Aronson, 1997). Adams’ contention was that people do not just become dissatisfied with unjust conditions, but that they actually do something about the condition to alleviate dissonance.

The equity theory model refers to efforts and rewards as inputs and outcomes (Adams, 1966). Simply put, inputs are what employees put into their work and outputs
are what employees take from their work. The ratio format used in Adam’s model indicates that an employee is interested in their inputs and outputs relative to others. The actual numbers are not as important as is the ratio as compared to what Adams refers to as the “referent other.” For example, an individual may still be satisfied even if they earn less than a referent other, provided that they contribute less toward the outcome. Adams (1966) believed that consequences could arise not only when a person is relatively underpaid but overpaid as well. Furthermore, in extreme cases, an inequity perception can contribute to workplace sabotage or employee theft in an attempt to get even or to make things more fair (Cropanzano, Bowen, & Gilliland, 2007).

Adams’ equity theory laid the foundation for organizational justice theory. Organizational justice is generally thought to have been introduced into the management literature in the late 1980s (Greenberg, 1987). Organizational justice has been primarily concerned with employee judgments of the behavior of the organization and the subsequent behavior influenced by these judgments. The three classifications outlined below are an outgrowth from Greenberg’s 1987 taxonomy. Research has shown that employees often evaluate several different classifications within the organizational justice framework (Arnold & Spell, 2006; Folger & Konovsky, 1989; Zoghi-Manrique-de-Lara, 2010). Each of the three classifications (distributive, procedural, and interactional) offer explanations and potential answers to the question of “What is fair” (Colquitt, Conlon, Wesson, Porter, & Ng, 2001).

The justice taxonomy typically includes distributive justice that concerns the justice of outcomes, procedural justice which involves the justice of formal distribution processes, and interactional justice which examines the perceived fairness of interpersonal dealings people have with others. Interactional justice generally emanates
from other individuals in the organization, whereas procedural and distributive justice perceptions typically originate from the organization. Therefore, the present research with third party (consumer) perceptions of firm justice as its focus will concentrate on the procedural justice component of the organizational justice framework. Individuals can define procedural justice as fairness in terms of the procedures used to decide an individual’s outcomes (Thibaut & Walker, 1975). Procedural justice can also be described in a general sense as the fairness of the policies used by the firm in their pursuit of company goals (Griffis, Rao, Goldsby, & Niranjan, 2012).

Procedural Justice

As previously noted, procedural justice refers to the perceived fairness of the means used to determine outcomes (Folger & Konovsky, 1989). The early study of procedural justice judgments found that no matter the outcome of a dispute, dispute resolution processes generated different fairness judgments. These findings indicated that subjects who were allowed to express their views and provide input into a dispute, viewed the procedures as more fair even if the resulting outcome was not in their favor (Thibaut & Walker, 1975; Walker, Latour, Lind, & Thibaut, 1974). This expression of views and input is a theoretical construct referred to as “voice.” Procedural justice, according to Thibaut and Walker (1975), is aided by voice during the decision making process. Additionally, observing fair process criteria, including representation, has been shown to foster procedural justice. Fair procedures are described by Leventhal (1980) as ones that are applied consistently, unaffected by self-interest, based on valid information, correctable, reflect the concerns of individuals affected by them, and adhere to prevailing ethical standards. Leventhal (1980) stated that representativeness means that the
organization’s processes should reflect the basic concerns and values of the population to be affected by those processes.

The concept of voice appears frequently in the procedural justice literature. Voice is sometimes referred to as process control. In other words, when affected individuals are given an opportunity to comment on, offer input, and/or influence the decision in some way, then the procedures used are perceived as being more fair (Gilliland, 1993; Price, Lavelle, Henley, Cocchiara, & Buchanan, 2006). In a meta-analysis of research where the primary interest was performance appraisals, Cawley, Keeping, and Levy (1998) found that when employees had a voice in the appraisal process employee satisfaction was increased, the appraisal was viewed as more fair, and employee motivation to do a better job improved. This occurred even when the employee’s input would not have affected the rating.

Traditionally, justice research has been conceptualized with the individual or employee as the target and his/her supervisors or the firm as the source. Procedural justice research has typically dealt with the individual’s perceived fairness of the firm’s policies and procedures. A review of procedural justice literature discovered studies of procedural justice as it effects employee resistance to change (Folger & Skarlicki, 1999), employee reactions to downsizing (Mishra & Spreitzer, 1998), reactions of layoff survivors (Brockner & Greenberg, 1990), manager’s team commitment and trust in the leader (Korsgaard, Schweiger, & Sapienza, 1995), employee selection practices (Gilliland, 1993), employee satisfaction with benefits (Arnold & Spell, 2006) perceived fairness of drug testing policies (Konovsky & Cropanzano, 1991), employee performance appraisal (Taylor, Tracy, Renard, Harrison, & Carroll, 1995), and incentive compensation (Dulebohn & Martocchio, 1998). These studies are typical of the extant procedural
justice research in that the employee or manager is the target and the supervisor or company is the justice source. Little is known about the consumer’s justice perceptions of a firm and the impact these perceptions have on a consumer’s likelihood to purchase from that firm (Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Konovsky, 2000; Viswesvaran & Ones, 2002).

The research opportunity described above is the focus of this research. This interdisciplinary study will take a well-defined and researched management theory and utilize it in a marketing study of uncontrolled marketing communications and consumer likelihood to purchase. Jeffrey (2003, p. 539) notes that research funding organizations are motivated to support interdisciplinary research because of their belief that “real-world problems do not come in disciplinary-shaped boxes.” It is the goal of this research study to provide new insights to marketers about justice and to explore the deontic justice perspective with consumers as the target rather than the employee.

Deontic Justice Perspective

Organizational behavior scholars have argued that the study of organizational justice, while ignoring morality, is not a complete study of the subject (Cropanzano et al., 2003). Cropanzano et al. found support for the proposition that people can have reasons other than their hunt for psychological control and self-esteem when they react negatively to unfairness in the workplace. The authors state that justice is in part a personal judgment about the morality of a result and not purely what serves a person’s economic self-interest.

A recent addition to the justice literature is the deontic justice perspective (Cropanzano et al., 2003; Rupp & Bell, 2010). Many consumer decisions are made in a rational way. However, the decisions may not always follow a rational agent model
Some of these decisions may be socio-emotional (involving personalities and relationships) in nature. These socio-emotional decisions can take place in the work place or personal lives (Carstensen, 1992). Some of the decisions made by individuals on a daily basis will also be economic in nature. These economic decisions may include shopping for the best price, the best value, or deciding when to replace a product.

The heart of deontic motivations for justice is that third parties naturally care about and will react to the unethical behavior of others (Cropanzano et al., 2003). The deontic justice literature speculates that a deontic perspective on the part of a consumer may result in a sense of moral unease when the consumer believes, or experiences, an employee being treated unfairly. This may cause the consumer to engage in moral self-regulation and to subsequently search for an alternate vendor that he/she perceives is treating their employees in a fair manner (Bougie, Pieters, & Zeelenberg, 2003; Rupp & Bell, 2010). This deontic motivation is rooted in moral reasoning and determinations about behavioral violations with respect to what an entity ought to or should do (Folger, Cropanzano, & Goldman, 2005).

Skarlicki, Ellard, and Kelln (1998) provide empirical research into the phenomena of third party observers of (in)justice. The stimulus in their study was a newspaper article, created for the study that outlined the layoff procedures used by a bank. The sample consisted of consumers, potential employees, and members of the general public. Consistent with earlier research within the employee-employer dyad, a satisfactory explanation and providing an opportunity for voice predicted the fairness judgments of the third party respondents. Additionally, when the observers felt that the layoff victim was given voice and adequate communication then they rated the procedures as fair.
The motivations for individuals to notice and focus on issues of fairness was the focus of research by Turrillo, Folger, Lavelle, Umpress, and Gee (2002). The authors modified, and built upon, an earlier experiment that appeared in the economics literature where students made allocations of money with people unknown to them and their identity was completely anonymous (Kahneman, Knetsch, & Thaler, 1986). Kahneman et al. found that the allocations in their experiment were quite generous between subjects. They reasoned that perhaps the respondents did not want to be part of an unfair transaction even though their exchange partner was unknown to them. The Turillo et al. (2002) research involved four studies and their results did not provide support for the notion that self-interest (social or material) was the sole or most important motivator for people to heed fairness issues. Their 2002 study found that third parties were willing to sacrifice monetary gain in order to penalize someone who had a preceding intent to be unjust, even when they did not know the intended victim, and had nothing to gain individually by their actions. Throughout all of the experiments the authors found that social self-interest and group identification did not appear to figure into the fairness decisions of the study subjects. This finding strengthened the authors’ argument that people’s attitude toward fairness may be more innate than previously thought. In summary, the study showed that people are willing to forgo financial rewards to express their disapproval of wrongful intent with respect to fairness. Therefore, the authors argue that virtue may really be its own reward and be a motivator for fairness as opposed to earlier studies that concentrated on self-interest as the motivator.

Bell and Main (2011) examined the effects a deontic motive and distrust have on the seeking of information about an agent in the marketplace who has behaved unethically. Undergraduate business students were used in their two studies. Study one
participants were given a newspaper article about a laundry detergent manufacturer who had been accused of deceptive advertising. In study two, a bird food producer was added because it was believed that the participants were not regular buyers of bird food and would not be drawn to the bird food manufacturer because of familiarity with the product. The researcher’s goal was to assess whether awareness of an agent’s unethical behavior would motivate a third party to seek out information about the agent under certain conditions. These conditions were that other options were available, the subjects were not dependent on the unethical agent, the information available was non-diagnostic, and dealing with the unethical agent was not a part of the task required. The results showed that the seeking of information about the unethical agent was deontically driven. Additionally, distrust because of the unethical behavior had a negative relationship to purchase intentions. This last finding suggested to the authors that the study subjects may have preferred to leave the agent and not purchase rather than search for more information. Last, the results of this study imply that third parties have an instinctive interest in obtaining additional information about the unethical agent even if they will not engage in any reprisal toward that firm.

The psychological process proposed by this deontic perspective is one in which individuals experience a sense of moral unease when they witness others being treated unfairly, motivating them to react against the perpetrator in order to address the injustice. Critical to the deontic view is the argument that the deontic state can be experienced by unaffiliated third parties who are in no way connected to or identify with the victim or perpetrator (Rupp & Bell, 2010). As previously noted, organizational justice research has historically focused on the employer-employee relationship with the employee as the target and the organization or its agent(s) as the source. The current research will
examine the perceptions and reactions of consumers outside of this immediate relationship. The research in this area has been described as scant and accumulating in a piecemeal fashion (Skarlicki & Kulik, 2005).

The justice literature has shown support for the notion that third parties base their decisions on fairness rules and that third parties will implement these rules even when doing so results in an economic cost to them. Additionally, third parties with almost no involvement with victims of injustice can become troubled and preoccupied with the fairness violations and seek to punish the offending firm through various methods. eWOM communications and third party justice observers outside of the employee-employer dyad are both relatively under-researched as compared to traditional offline word-of-mouth and third party justice observers within the employee-employer dyad. Importantly, for every instance of firm injustice, there are more third parties than victims (Skarlicki & Kulik, 2005); these third parties, being outside of the firm, are not inhibited by potential retribution by the firm. The motivation for potential retribution and the impact it may have on likelihood to purchase are areas that can make an interdisciplinary contribution to both the marketing and management literatures.

Traditionally, procedural justice has been studied with the firm or supervisor as the source of the (in)justice and the supervisor or employee as the target. A recent addition to the justice literature is the notion of a deontic justice motivation that is not based on self-interest but rather a concern for the fair treatment of others. The deontic perspective is one in which individuals may experience moral discomfort when they witness others being treated unjustly. Important to the deontic motivation perspective is the argument that a deontic state can be experienced by third parties who are not associated with, nor connected to, the target or the source of the (in) justice. This
research proposes that eWOM messages can influence a consumer’s procedural justice perceptions of a firm. Therefore the second hypothesis is as follows:

*Hypothesis 2: Negative eWOM messages will be negatively related to consumer perceptions of the procedural justice of the firm when the firm is perceived to be the source of the injustice and the firm’s employee(s) are the victim(s).*

Previous research indicates that consumers’ likelihood to purchase can be influenced by brand preference, prior experience with the product, atmospherics, country of origin, sustainability perceptions, and stealth marketing. It is proposed in this research that a consumer’s procedural justice perceptions of the firm toward its employees may also influence consumers’ likelihood to purchase. Researchers have found that people can have reasons other than self-interest that can cause them to react negatively in the workplace. This research proposes that a deontic justice motivation may cause a consumer to react, in the marketplace, against a perpetrator of injustice in order to right what is perceived as a wrong. Therefore the third hypothesis is as follows:

*Hypothesis 3: Negative consumer perceptions of the procedural justice of the firm, when the firm is perceived to be the source of the injustice and the firm’s employee(s) are the victim(s), will be negatively related to consumer likelihood to purchase.*

Value Consciousness

Zeithaml (1988) describes consumer value as the perception of what is received for what is given. A simplified example of this equation would be a consumer giving up money to obtain a good or service. Consumers may also surrender other resources such as time, energy, and effort during an exchange for goods and services. Furthermore,
consumers may include high level abstractions in their “get” factor such as prestige or appreciation.

Value consciousness is defined as “a concern for paying low prices, subject to some quality constraint” (Lichtenstein, Netemeyer, & Burton, 1990, p. 56). This definition is based on the supposition that for most consumers, price and quality are the most relevant give and get components respectively (Zeithaml, 1988). Lichtenstein et al. (1990) found that value consciousness was separate and distinct from coupon proneness or deal proneness. Additionally, the authors state that value and value consciousness are not synonymous terms and should not be used interchangeably. Since 1990, the construct of value consciousness has been incorporated in research on consumers of store brand products (Dick, Jain, & Richardson, 1995; Kara, Rojas-Méndez, Kucukemiroglu, & Harcar, 2009), country of origin effects (Sharma, 2011), and consumer post-purchase search intention (Dutta & Biswas, 2005). It is predicted in the current research that a value conscious consumer will be motivated to improve their acquisition (consumer quality or benefits perception relative to the selling price) and transaction (consumer deal perception) value. Therefore the fourth hypothesis is as follows:

_Hypothesis 4: Value consciousness will moderate the relationship between consumer perceptions of procedural justice and consumer likelihood to purchase such that the relationship will be positively affected as value consciousness increases._

This chapter has provided a review of the relevant literature for the constructs presented in the operational model (See Appendix, Figure 2). Additionally testable hypotheses were presented. Chapter 3 will provide an overview of the methodology that will be employed to test the hypotheses outlined in this chapter.
CHAPTER 3
RESEARCH METHODOLOGY

This chapter provides a description of the research methods that are utilized to test the hypothesized relationships presented in Chapter Two. An overview of the design is presented followed by a description of the sample. Next, the data collection and pilot testing procedures are outlined, followed by an in-depth description of the research instrument. Last, the methods of data analysis are discussed, including the hypothesis testing procedures.

Design

This research utilizes an experimental design to test the hypothesized relationships presented in Chapter Two and graphically illustrated in Figure 2 below.

Figure 2. Operational Model
Experimental designs are regularly used by researchers studying how and why consumers purchase goods and services (Chang & Wildt, 1994; Chen et al., 1998; Coulter & Coulter, 2005; Juster, 1966). In the current study, the treatment conditions are randomly assigned to the study participants by commercial online survey software (Qualtrics®). A distinguishing feature of a randomized experiment is that the various treatment conditions are assigned by chance. In that way, the resulting treatment groups will be similar, on average, to one another (Shadish, Cook, & Campbell, 2002). Random assignment is a primary characteristic differentiating experimental designs from quasi-experimental designs, and quasi-experimental designs are most frequently used when random assignment is not practical or possible (Gribbons & Herman, 1997; Shadish et al., 2002).

The typology in Table 1 below, originally published in *The SAGE handbook of quantitative methods in psychology* (Millsap & Maydeu-Olivares, 2009, p. 62), affirms randomization as the primary distinction between experiments and quasi-experiments.

<table>
<thead>
<tr>
<th>Prominent size-of-effect factor</th>
<th>Assignment To Treatment</th>
<th>Assignment To Treatment</th>
<th>Assignment to Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Random</td>
<td>Non-Random (quasi-experiment)</td>
<td>No Explicit Quantitative Ordering</td>
<td></td>
</tr>
<tr>
<td>Recipient Recipient design</td>
<td>Regression-Discontinuity Design</td>
<td>Nonequivalent Group Design</td>
<td></td>
</tr>
<tr>
<td>Time Randomized Time Design</td>
<td>Interrupted Time-Series Design</td>
<td>Nonequivalent Time Design</td>
<td></td>
</tr>
<tr>
<td>Outcome Variable Randomized Outcome Variable Design</td>
<td>Discontinuity Across Outcome Variables Design</td>
<td>Nonequivalent Outcome Variable Design</td>
<td></td>
</tr>
<tr>
<td>Setting Randomized Setting Design</td>
<td>Discontinuity Across Settings Design</td>
<td>Nonequivalent setting Design</td>
<td></td>
</tr>
</tbody>
</table>

Table 1. A Typology of Comparisons – Experiments and Quasi-Experiments
Furthermore, Shadish et al. (2002, p. 14) state that “by definition, quasi-experiments lack random assignment.” A thorough search of the literature provided additional support for representing the current research as a randomized experiment (Campbell, Stanley, & Gage, 1963; Hair, Black, Babin, & Anderson, 2010; Perdue & Summers, 1986).

Using an experimental design in the current research allows the researcher to control the environment each respondent faces. This environmental control can aid in isolating potential cause and effect relationships (Kollat, Engel, & Blackwell, 1970). Furthermore, by utilizing an experiment, the researcher is able to establish that the independent variables precede the dependent variables, thus reducing threats to the internal validity of the study (Calder, Phillips, & Tybout, 1981; Cook & Campbell, 1976). Internal validity “addresses the question as to whether or not the experimental variable made a difference in the specific instance under consideration” (Winch & Campbell, 1969, p. 141).

Sample

Using previous marketing research as a guide, the sample for this research is drawn from currently enrolled undergraduate students or recent graduates (one year or less since degree completion) at a liberal arts college located in the southeastern United States (Bellizzi & Hite, 1992; Chen et al., 1998; Fiore et al., 2000; Kwon & Schumann, 2001; Shor & Oliver, 2006). It has been noted that most experiments are restricted to some degree and regularly use a convenience sample of study subjects (Shadish et al., 2002). Furthermore, convenience samples are common in the marketing literature and the basis for much marketing research (Calder et al., 1981; Peterson, 2001). Previous research examining consumer likelihood to purchase and the antecedents of this behavior has made use of both undergraduate and graduate student samples (Coulter & Coulter,
According to Cohen (1988, p. 7), “whatever else sample reliability may be dependent upon, it always depends upon the size of the sample.” With respect to sample size, Hair et al. (2010) cautions researchers that a small sample can cause the statistical test in use to be insensitive to effects that are present in the data, whereas an extremely large sample size may cause excessive sensitivity to small effects present in the data. Therefore, it can be concluded that the size of the sample is an important consideration when conducting research. Cohen (1988, pp. 4-5) describes Type I error (or alpha error) as “the rate of rejecting a true null hypothesis” and Type II error (or beta error) as “the ‘error’ rate of failing to reject a false hypothesis.” The power of the statistical test is an extension of Type II error and is represented as 1-β. Because Type I and Type II errors are inversely related “researchers must strike a balance between the level of alpha and the resulting power” (Hair et al., 2010, p. 9).

Hair et al. (2010) offer a rule of thumb range when making sample size considerations during the research design process. The preferred ratio of observations to variables is suggested to be 15:1 or 20:1. Following these ratio guidelines would result in a suggested respondent sample size, for the current research, of 75 to 100 subjects.
Cohen (1988) suggests that studies be designed to achieve alpha levels of at least .05 with power levels of at least 80 percent. A power analysis was undertaken to better specify the sample size needed for this research.

The *a priori* power analysis was performed using estimates of three factors: alpha level, power, and effect size. An estimated alpha of .05, an effect size of .15 (which Cohen (1988) considers a medium effect size), and a desired statistical power level of .90 were specified. A power level of .80 is the minimum power level recommended when conducting statistical inference tests (Cohen, 1988; Hair et al., 2010). The number of predictors included all of the independent variables in the research model (Cohen, 1988; Hair et al., 2010; Soper, 2012). The resulting minimum required sample size of respondents was calculated to be 116. Using the previous calculation and rule of thumb range, 160 study subjects is the target sample size for the current research. This target sample size allows for the potential loss of some collected instruments due to incomplete data, manipulation check failure, or other corruption and still allow the research findings to detect a significant relationship if one exists (Hair et al., 2010; Tabachnick & Fidell, 2001). Within the Qualtrics® survey software, the treatment conditions are created using “blocks”. Following the creation of the treatment condition blocks, the randomizer function is employed to evenly distribute the respondents across the different conditions.

Data Collection and Procedures

The student sample was asked to complete an online research instrument. The use of online surveys in academic research has experienced tremendous growth over the last decade (Terhanian & Bremer, 2012). The strengths of using an online delivery method include the ease of data entry, convenience, speed, timeliness, and the ability to require completion of answers (Evans & Mathur, 2005). The research invitation was
delivered via the college email system. Those students participating in the survey, if they chose, were entered in a drawing to win $100.00. Approval to collect and use the data in the current research was obtained through the Institutional Review Board (IRB) protocol both at Kennesaw State University as well as the college where the student sample was obtained. The lead researcher for this study is IRB certified.

To maximize the number of usable instruments, several elements reported to increase the benefits of participation and decrease the perceived costs of participation are incorporated in the research design (Dillman, Smyth, & Christian, 2009). These design elements include offering a cash reward opportunity for completing the exercise, making it convenient for the study subjects to respond, making the research instrument short and easy to complete, minimizing requests for personal or sensitive information, and ensuring confidentiality and security of the information given. The online research instrument also included a progress indicator which has been shown to increase web based survey completion (Couper, Traugott, & Lamias, 2001).

Randomization

The experimental design incorporates fictionalized consumer review forums (both positive and negative), as well as pro- and anti- brand web pages, to create the electronic word-of-mouth treatment conditions. The treatment conditions studied are no eWOM, negative eWOM, and positive eWOM. The impact of the manipulated eWOM conditions on consumer procedural justice perceptions and likelihood to purchase are then assessed as well as any interaction effects between value consciousness and the above named constructs.

Random assignment is used to create the different treatment groups of respondents (no eWOM, negative eWOM, and positive eWOM). Internet survey
software performed the random assignment of the study subjects to the different treatment conditions. Random assignment of treatment conditions is commonly used to demonstrate that the variable influencing the result, in this case eWOM, is the condition being manipulated. The Internet survey software randomly assigned the research subjects to the different treatment conditions creating treatment groups that are equal, or near equal, with respect to the number of respondents in each treatment group. Using the protocol described above helped to eliminate any accidental bias in the experiment and create groups that are comparable in all respects except for the treatment condition each group received (Hair et al., 2010; Suresh, 2011).

Respondents randomly assigned to the no eWOM treatment condition did not receive the uncontrolled communications conveyed via the fictionalized consumer review forums and brand sites. The respondents receiving the negative and positive eWOM treatment conditions proceeded, after the treatment delivery, to the procedural justice portion of the instrument. Following two buffer activities, which are introduced to create a psychological and temporal separation between predictor and criterion variables, the positive and negative eWOM condition groups continued to the likelihood to purchase portion of the online questionnaire. The aforementioned buffer activities, as well as other strategies, that are incorporated into the study to address mono-methods bias are discussed in more depth later in Chapter Three. Last, the positive and negative eWOM groups answered the manipulation check question.

Pilot Testing

Pilot testing the instrument helped to improve the likelihood of success of the current study (Hair, Celsi, Money, Samouel, & Page, 2011; van Teijlingen & Hundley, 2001). A pilot study with a small group of subjects who were similar to the target sample
assisted in identifying potential problems with the online survey delivery system, confusing instructions, and question complexity that could have hampered the sample respondents. A pilot test of the research instrument was performed with a small group of 10 undergraduate students at a university in the southeastern United States. The pilot test feedback helped to ensure that the final research instrument was clear, understandable, and resulted in accurate measurements.

Research Instrument

This section provides an in-depth review of the research instrument. The full instrument can be viewed in the Appendix. Constructs and the scales that are used to measure those constructs will be described and defined. For a concise listing of the measures, including descriptions and sources, see Table 2.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Consciousness</td>
<td>Concern for paying low prices subject to some value constraint.</td>
<td>Lichtenstein et al., 1990</td>
</tr>
<tr>
<td>Procedural Justice</td>
<td>Consumer perceptions of how fair and free of bias firm procedures are with respect to their employees.</td>
<td>Colquitt, 2001; Niehoff &amp; Moorman, 1993</td>
</tr>
<tr>
<td>Likelihood to Purchase</td>
<td>Consumers’ likelihood to purchase a brand or product.</td>
<td>Putrevu &amp; Lord, 1994</td>
</tr>
</tbody>
</table>

Table 2. Summary of Measures

Value consciousness.

The extant marketing literature, as noted previously, has identified a variety of variables that serve as influencers of consumer likelihood to purchase. This array of variables can be attributed, in part, to the diversity and complexity of the human being. One variable influencing consumer purchases is defined as “a concern for paying low
prices, subject to some quality constraint” (Lichtenstein et al., 1990, p. 56) and is labeled value consciousness.

Value conscious consumers are motivated to maximize their acquisition value (consumer quality or benefits perceptions relative to the selling price) and their transaction value (consumer deal perception). The value consciousness scale is presented first in the online research instrument. This decision was made in order to minimize or avoid any potential linear connection that might be drawn by the study subjects between value consciousness and likelihood to purchase, thus potentially introducing bias in the data collection. Creating separation between the value consciousness measure and the likelihood to purchase measure is a potential remedy to common methods bias (Podsakoff, MacKenzie, Jeong-Yeon, & Podsakoff, 2003). By introducing this temporal separation, the respondents are less able to recall and use their responses to the value consciousness measure as they answer the likelihood to purchase questions. All respondents received the value consciousness portion of the questionnaire.

The reliability of the 7 item Likert-type scale, when used with a student sample, was reported by Lichtenstein et al. (1990) to be .80. Scores on the items are summed to form the value consciousness score (Lichtenstein et al., 1990). The value consciousness concept and scale have previously been used in marketing research conducted by Grewal et al. (1998), Dutta and Biswas (2005), and Lichtenstein, Ridgway, and Netemeyer (1993). The value consciousness scale can be viewed in the Appendix.

Consumer purchase scenario.

Following the value consciousness measure, the participants were presented a consumer purchase scenario. Athletic shoes have previously been used as product stimuli in the marketing literature due to consumer familiarity with this product class (Erdem &
Scholars have stated that a familiar product or product category tends to produce more reliable and valid responses from study participants (Yoo et al., 2000). Recent research (Lee & Lou, 2011) reported that a student sample regarded the U.K. as the best manufacturer of athletic shoes and considered $84.99 a fair price for a quality pair of athletic shoes. Incorporating findings from previous research, the consumer purchase scenario (see Appendix) outlined a purchase of athletic shoes. All respondents received the consumer purchase scenario.

Controlled marketing message.

A fictionalized firm-controlled marketing message immediately followed the consumer purchase scenario. The fictional athletic shoe introduced in this controlled marketing message was labeled the Pegasus XR. Prior research indicates that style, sole cushion, and durability are important intrinsic cues when selecting a pair of athletic shoes (Lee & Lou, 2011). These attributes were integrated into the controlled marketing message. After a thorough internet search of general purpose Nike® and Converse® athletic shoes with comparable prices, it was discovered that the two large athletic shoe manufacturers offer several customizable options. Therefore, the controlled marketing message also included similar customizable options. All respondents received the controlled marketing message (see Appendix).

eWOM conditions.

Fictionalized treatment conditions appear frequently in marketing research and have been created to study web-based marketing, insurance purchases, advertisements, and message appeals (Coyle & Thorson, 2001; Dean, 2010; Putrevu & Lord, 1994; Yan et al., 2010). Additionally, prior research studying on-line consumer reviews reported that respondents from a focus group of students indicated that the students generally read
five or six reviews of three to four lines each when shopping on-line (Park et al., 2007). Using this prior research as a guide, the current research uses fictionalized consumer review forums that include seven messages for each condition. Prior research has also indicated that a minority of negative messages among a majority of positive messages (and vice versa) may positively contribute to the source credibility of the review site (Doh & Hwang, 2009). Therefore, the positive consumer review portion of the treatment condition contains two negative comments, and the negative consumer review portion of the treatment condition contains two positive comments. The comments are based on, and similar to, comments actually appearing in online forums. These comments range from two to four lines each (Park et al., 2007). The positive and negative fictionalized review forums can be viewed in the Appendix.

Brand sites.

The fictionalized anti-brand site web page created for this study is modeled after existing anti-brand sites like Untied.com (United Airlines) and HomeDepotSucks.com (Home Depot) in form and content. Conversely, the pro-brand web page created for the study is modeled after existing pro-brand sites like CultOfMac.com (Apple, Inc.) and Starbucksmelody.com (Starbucks). These existing sites are uncontrolled by the firms being discussed on the sites. The fictionalized pro- and anti- web site home pages that are used in the current research project can be viewed in the Appendix.

Procedural justice.

Procedural justice is concerned with the perception of the integrity and equity of the policies and procedures used by the firm to make decisions and allocate resources (Greenberg, 1990; Tax, Brown, & Chandrashekaran, 1998). As described in Chapter Two, the current research proposes that a consumer’s procedural justice perception of the
firm, toward its employees, may influence likelihood to purchase from that firm. In order to effectively measure this construct, several procedural justice scales were reviewed to assess their appropriateness for the current research (Colquitt, 2001; Folger & Konovsky, 1989; Hauenstein, McGonigle, & Flinder, 2001; Moorman, 1991; Niehoff & Moorman, 1993; Tax et al., 1998). Two scales emerged as the most suitable. The procedural justice items used in this research are adapted from Colquitt (2001) and Niehoff and Moorman (1993). These two pieces of academic research have been cited nearly 3,000 times (http://scholar.google.com) and are well established measures of procedural justice perceptions.

The study subjects were asked to respond using a 5-point scale ranging from 1 (to a small extent) to 5 (to a large extent). Using a 5-point scale creates a format change in the research instrument. MacKenzie and Podsakoff (2012) suggest changing scale formats so as to reduce a condition that may cause mono-methods bias. The Cronbach alpha for the Colquitt (2001) procedural justice measure has been reported in prior research to be .86 to .90, respectively (Ambrose & Schminke, 2009; Colquitt & Rodell, 2011). The reliability for the Niehoff and Moorman (1993) scale has been reported to be .90. All respondents received the procedural justice scale.

Buffer activities.

The research instrument separates the procedural justice portion of the survey instrument from the dependent variable of likelihood to purchase by introducing two distracting or buffer activities. Introducing unrelated buffer activities to separate items of interest to the researcher is a potential remedy to common methods bias in marketing research (MacKenzie & Podsakoff, 2012; Prendergast et al., 2010). Inserting these activities, according to MacKenzie and Podsakoff (2012), may promote more thorough
item comprehension and make it harder for respondents to recall their previous answers as they respond to new questions.

The first activity is an established scale measuring a consumer’s desire for unique consumer products (Lynn & Harris, 1997). The uniqueness measure is an eight item scale using a 5 point Likert-type scale. The scale ranges from 1 (strongly disagree) to 5 (strongly agree) (see Appendix). The second distracting activity asks the study participants to identify, using birth year ranges, the generational cohort to which they belong (see Appendix). Selecting a demographic cohort group using a birth year range requires more attention and thought from the respondents than requesting a birth year which can be a more automatic response. These two buffer activities are not specified in the operational model. All respondents received the buffer activities.

Likelihood to purchase.

The dependent variable, likelihood to purchase, is measured using likelihood to purchase items previously tested and used by Putrevu and Lord (1994) as well as Coyle and Thorson (2001). The items are customized for the current research as shown below in Table 3.

<table>
<thead>
<tr>
<th>Original Item (Putrevu &amp; Lord, 1994)</th>
<th>Customized Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is very likely that I will buy (brand).</td>
<td>It is very likely that I will buy the Pegasus XR.</td>
</tr>
<tr>
<td>I will purchase (brand) the next time I need a (product).</td>
<td>I will purchase the Pegasus XR the next time I need a pair of athletic shoes.</td>
</tr>
<tr>
<td>I will definitely try (brand).</td>
<td>I will definitely try the Pegasus XR.</td>
</tr>
</tbody>
</table>

Table 3. Customized Likelihood to Purchase Measure

Petrevu and Lord (1994) reported the three item likelihood to purchase scale, using 7-point Likert-type scales (strongly disagree = 1, strongly agree = 7), yielded Cronbach alpha reliability of .81, .87, and .91, respectively. A higher score indicates higher purchase intention (Appendix). The likelihood to purchase scale differs in format from
the 5-point desire for unique products scale (buffer activity) which precedes it in the
desire for unique products scale. According to MacKenzie and Podsakoff (2012), format changes of
scales in the same document is a potential remedy for common methods bias.

Manipulation check.

A question embedded in the research instrument serves as a manipulation check to
assess the effectiveness of the manipulations on creating the appropriate conditions (see
Appendix). This question asked the respondents to report, on a 7-point Likert-type scale
how they perceived the treatment condition they were offered. The manipulation check
question asked the respondents whether, in their judgment, the consumer review forum
and the brand web page they received contained a majority of information about the
Pegasus XR shoe and the Pegasus Company that was negative or positive. The answer
choices ranged from 1=strongly negative to 7=strongly positive (see Appendix). Table 4
below provides a summary of the document order delivery.

<table>
<thead>
<tr>
<th>No eWOM Condition</th>
<th>Positive EWOM Condition</th>
<th>Negative eWOM Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Value Consciousness Scale</td>
<td>Value Consciousness Scale</td>
<td>Value Consciousness Scale</td>
</tr>
<tr>
<td>2 Consumer Purchase Scenario</td>
<td>Consumer Purchase Scenario</td>
<td>Consumer Purchase Scenario</td>
</tr>
<tr>
<td>3 Controlled Marketing Message</td>
<td>Controlled Marketing Message</td>
<td>Controlled Marketing Message</td>
</tr>
<tr>
<td>5 Buffer Activity 1 – Desire For Unique</td>
<td>Pro-Brand Website Home Page</td>
<td>Anti-Brand Website Home Page</td>
</tr>
<tr>
<td>6 Buffer Activity 2 – Generational Cohort</td>
<td>Procedural Justice Perception Scale</td>
<td>Procedural Justice Perception Scale</td>
</tr>
<tr>
<td>7 Likelihood to Purchase Scale</td>
<td>Buffer Activity 1 – Desire For Unique Consumer</td>
<td>Buffer Activity 1 – Desire For Unique Consumer</td>
</tr>
<tr>
<td>8 Demographic Questions</td>
<td>Buffer Activity 2 – Generational Cohort</td>
<td>Buffer Activity 2 – Generational Cohort</td>
</tr>
</tbody>
</table>
Hypothesis 1 states that consumer likelihood to purchase will be negatively affected by negative eWOM. In this study, the eWOM treatment conditions are conveyed via fictionalized consumer review forums and fictionalized anti- and pro-brand web pages. For the purposes of hypothesis testing and data analysis, it was necessary to create dummy variables to act as replacement variables for the three non-metric treatment conditions (no eWOM, negative eWOM, and positive eWOM). Hair et al. (2010, p. 86) state that “any non-metric variable with k categories can be represented as k-1 dummy variables.” The reference condition, receiving all zeros for dummy variables, is the no eWOM condition. The remaining treatment conditions are represented as shown in Table 5 below.

<table>
<thead>
<tr>
<th>Treatment Condition</th>
<th>Dummy Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative eWOM Treatment</td>
<td>$X_2 = 1$, other = 0</td>
</tr>
<tr>
<td>Positive eWOM Treatment</td>
<td>$X_3 = 1$, other = 0</td>
</tr>
</tbody>
</table>

Table 5. Dummy Coding of Treatment Conditions

By creating these dummy variables (sometimes referred to as indicator variables because they indicate a treatment group represented in the sample), these non-continuous treatment groups can be included in a regression model. SPSS® statistics software was used to analyze the data collected for this research. A one-way ANOVA was conducted to examine any statistically significant differences between the mean likelihood to purchase scores in the three eWOM treatment conditions. Post-hoc testing was then conducted to identify any significant differences that were found.
Hypothesis 2 states that negative eWOM will have a negative effect on consumer perceptions of the procedural justice of the firm. A one-way ANOVA was conducted to examine any statistically significant differences between the mean procedural justice scores in the three eWOM treatment conditions. The ANOVA and post-hoc testing was similar to the testing procedures used to test the first hypothesis.

Hypothesis 3 states that negative consumer perceptions of the procedural justice of the firm will have a negative effect on consumer likelihood to purchase. A regression analysis was conducted to test hypothesis 3. The specified regression analysis had procedural justice predicting likelihood to purchase.

Holmbeck (1997, p. 599) describes a mediating variable as one that “specifies how (or the mechanism by which) a given effect occurs.” Baron and Kenny’s (1986) mediated regression approach was applied to test for any mediation effects procedural justice perceptions may have on the eWOM – likelihood to purchase relationship. Table 6 provides a summary of the steps performed.

<table>
<thead>
<tr>
<th></th>
<th>Analysis</th>
<th>Visual Illustration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Conduct a regression analysis with eWOM predicting LTP</td>
<td>eWOM → LTP</td>
</tr>
<tr>
<td>Step 2</td>
<td>Conduct a regression analysis with eWOM predicting PJ</td>
<td>eWOM → PJ</td>
</tr>
<tr>
<td>Step 3</td>
<td>Conduct a regression analysis with PJ predicting LTP</td>
<td>PJ → LTP</td>
</tr>
<tr>
<td>Step 4</td>
<td>Conduct a regression analysis with eWOM and PJ predicting LTP</td>
<td>eWOM → PJ → LTP</td>
</tr>
</tbody>
</table>
Table 6. Mediation Analysis Steps

Step one is to establish that a direct relationship does exist between eWOM and the likelihood to purchase. Step two is to establish that procedural justice perception (mediator) is related to eWOM. Step three is to establish that procedural justice perception has a relationship with likelihood to purchase. This relationship is tested with a regression analysis of procedural justice perception predicting likelihood to purchase. With significant relationships in the first three steps, the final step conducts a multiple regression analysis (using simultaneous entry rather than hierarchical entry) with eWOM and procedural justice perception predicting likelihood to purchase.

Hypothesis 4 states that as value consciousness increases, the relationship between procedural justice perceptions and likelihood to purchase will be positively affected. As graphically illustrated in Figure 2 (Appendix), value consciousness is depicted in the operational model so as to indicate that it has an impact on the relationship between consumer perceptions of procedural justice and likelihood to purchase.

The value consciousness, procedural justice perception, and likelihood to purchase constructs are measured with Likert-type continuous scales. It is desirable, according to Baron and Kenny (1986), for the moderator (value consciousness) to be measured prior to the predictor (procedural justice perception) being measured. As previously noted, the value consciousness scale is delivered to the respondents first, prior to the procedural justice measure which is presented later in the online instrument.

The preferred strategy, according to Holmbeck (1997, p. 600), for statistically testing moderators is “to use variables in their continuous form (if they are not dichotomies) and to use multiple regression techniques.” In the current research, the
main effects for procedural justice perception and value consciousness are entered followed by the interaction term (procedural justice perception * value consciousness). The main effects must be entered before the interaction term (Holmbeck, 1997). Descriptive statistics, correlations, and model significance are reported in Chapter Four.

Summary

The current research aims to assess the impact eWOM has on consumer likelihood to purchase and whether a consumer’s third party view of the firm’s procedural justice toward its employees affects this relationship. The extent to which consumers’ value consciousness moderates the relationship between their procedural justice perception and likelihood to purchase is also examined. The current research is interdisciplinary in nature, including both marketing and management constructs.

Chapter Three presented the methodology for the research. It began with an overview of the study design, followed by a discussion of the sample and data collection procedures. A detailed description of the research instrument followed. Last, the methods of statistical analysis were outlined. Chapter Four will present the analysis of the data and the findings of the study.
CHAPTER 4

RESEARCH RESULTS

An invitation to the online instrument was delivered via the college email system. The college managed student email list was comprised of 2,186 student email addresses. The invitation link remained active for three days before being deactivated and collected 250 responses resulting in a response rate of 11%. Due to the high rate of response, a sufficient sample had been collected during the three day window that the online instrument was active (see page 53 for power analysis). Respondents who failed the manipulation check were removed from the collected data, resulting in 226 usable respondents for an effective response rate of 10%. A respondent who was assigned to either a positive or a negative eWOM condition but incorrectly identified their assigned condition later in the instrument was considered to have failed the manipulation check. This response rate compares favorably to other research incorporating email invitations to online instruments (Senecal & Nantel, 2004; Skadberg & Kimmel, 2004). As a result of the randomization of the treatment conditions, the negative eWOM condition has an n = 73, the positive eWOM condition has an n = 68, and the no eWOM condition has an n = 85. The demographic characteristics of the sample are presented in Table 7.
<table>
<thead>
<tr>
<th>School Class</th>
<th>%</th>
<th>Major</th>
<th>%</th>
<th>Ethnicity</th>
<th>%</th>
<th>Generational Cohort</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman/1st Year</td>
<td>21</td>
<td>Business</td>
<td>34</td>
<td>White</td>
<td>90</td>
<td>Millennial (Born 1981-2000)</td>
<td>100</td>
</tr>
<tr>
<td>Sophomore</td>
<td>19</td>
<td>Ed &amp; Human Science</td>
<td>11</td>
<td>Hispanic/Latino</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior</td>
<td>30</td>
<td>Humanities, Arts &amp; Soc Sciences</td>
<td>23</td>
<td>Black/African American</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td>28</td>
<td>Math &amp; Natural Sciences</td>
<td>27</td>
<td>Other</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergrad Complete No Grad School</td>
<td>.44</td>
<td>Nursing</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>Don’t Know</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7. Demographic Characteristics of Sample

The most recent ethnicity information provided by the institution indicates that 84% of the total enrolled undergraduate and graduate population reported themselves to be White/Non-Hispanic. Therefore, the similar percentage of respondents indicating their ethnicity as White in the current research was not unexpected. The demographics of those who failed the manipulation did not differ significantly from the demographics of those in the final sample.

Summated Scales

While all of the items comprising the likelihood to purchase, procedural justice, and value consciousness scales have been tested and used in prior research, only the value consciousness scale was used in this research without any modifications. The likelihood to purchase scale was customized to reflect the stimulus used in the treatment conditions while the procedural justice scale items came from two established scales.
A factor analysis with varimax rotation was conducted to assess the underlying factor structure for the 17 items contained in the three scales. Table 8 displays the items and factor loadings for the rotated factors. The full factor matrices for Tables 8, 9, 10, and 11 are located in the Appendix. A specified number of factors were not requested beforehand. After rotation, the first factor accounted for 22.3% of the variance, the second factor accounted for 14.7% of the variance, the third and fourth factors accounted for 9.9% each. The total variance extracted, after rotation, was 56.65%. This is within the guidelines recommended by Hair et al. (2010), who suggest a total percentage of variance of approximately 60% as acceptable in the social sciences. The eigenvalues reported were 5.2 for the first factor, 3.2 for the second factor, 1.7 for the third factor, and 1.2 for the fourth factor.

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PJ5</td>
<td>.757</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ3</td>
<td>.729</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ1</td>
<td>.717</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ2</td>
<td>.710</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ7</td>
<td>.708</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ6</td>
<td>.687</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ4</td>
<td>.638</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LTP2</td>
<td>.907</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LTP3</td>
<td>.852</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LTP1</td>
<td>.823</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VC2</td>
<td>.791</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VC7</td>
<td>.717</td>
<td>.341</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VC6</td>
<td>.578</td>
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<tr>
<td>VC4</td>
<td>.736</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VC3</td>
<td>.717</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VC5</td>
<td>.320</td>
<td>.473</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VC1</td>
<td></td>
<td>.439</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes. Loadings < .30 are omitted
Eigenvalue > 1
Table 8. Factor Analysis Using Varimax Rotation
According to Hair et al. (2010), a significant factor loading for a sample size of 226 would be approximately .35. Using this as a guideline, the procedural justice items, originating from two previously used scales, loaded strongly on the first factor. Additionally, the likelihood to purchase items loaded strongly on the second factor. The value consciousness scale items loaded on factors 3 and 4 and showed some cross loadings between factors. As previously stated, value consciousness is defined as “a concern for paying low prices, subject to some quality constraint” (Lichtenstein et al., 1990, p. 56). In examining the specific questions, scale items VC3 and VC4, which have strong loadings on factor 4, are both primarily concerned with quality maximization.

Scale items VC2 and VC7, which have strong loadings on factor 3, reference grocery shopping specifically. VC1 and VC5, with weak loadings on factor 4, both reference low prices in the first part of the question followed by product quality in the last part of the question. VC6 asks about “price per ounce” comparisons and has a moderately weak loading on factor 3.

To further explore the factor structure another factor analysis was performed using an oblique rotation method. A specified number of factors was not requested beforehand. An examination of the correlation table revealed several correlations at or around .32. According to Tabachnick & Fidell (2007), this may indicate that an oblique rotation method may be warranted. The factor analysis results using the Promax rotation method are shown below in Table 9. With loadings <.30 suppressed, the items loaded on four factors. The total variance extracted was 66% which is within the guidelines for social science research suggested by Hair et al. (2010). Again, the procedural justice and likelihood to purchase items loaded together with the value consciousness items loading on factors three and four. The items loading on factor three (VC2, VC7, VC6) are
“grocery shopping” related items. Two of the three questions mention grocery shopping specifically while the third concerns “price per ounce” information.

Another factor analysis using the Promax rotation method was requested. In this second analysis using an oblique rotation method, three factors were requested beforehand. This decision was based on the fact that the items were designed to measure three separate and unrelated constructs (likelihood to purchase, procedural justice, and value consciousness). The total variance extracted was 58.9% which is within the guidelines suggested by Hair et al. (2010). The results are shown below in Table 10. In this analysis all of the value consciousness items loaded on factor 3.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PJ1</td>
<td>.781</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ3</td>
<td>.754</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ5</td>
<td>.752</td>
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<td></td>
</tr>
<tr>
<td>PJ2</td>
<td>.724</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ6</td>
<td>.712</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ7</td>
<td>.685</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ4</td>
<td>.642</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LTP2</td>
<td></td>
<td>.957</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LTP3</td>
<td></td>
<td>.892</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LTP1</td>
<td></td>
<td>.855</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VC2</td>
<td></td>
<td></td>
<td>.849</td>
<td></td>
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<tr>
<td>VC7</td>
<td></td>
<td></td>
<td>.715</td>
<td></td>
</tr>
<tr>
<td>VC6</td>
<td></td>
<td></td>
<td>.616</td>
<td></td>
</tr>
<tr>
<td>VC4</td>
<td></td>
<td></td>
<td></td>
<td>.774</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>.766</td>
</tr>
<tr>
<td>VC1</td>
<td></td>
<td></td>
<td></td>
<td>.430</td>
</tr>
<tr>
<td>VC5</td>
<td></td>
<td></td>
<td></td>
<td>.416</td>
</tr>
</tbody>
</table>

*Note*. Loadings < .30 are omitted

Eigenvalue > 1

Table 9. Factor Analysis Using Promax Rotation
### Table 10. Factor Analysis Using Promax Rotation - Requesting 3 Factors

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>PJ1</td>
<td>.783</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ3</td>
<td>.761</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ5</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>PJ2</td>
<td>.725</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ6</td>
<td>.712</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ7</td>
<td>.686</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ4</td>
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</tr>
<tr>
<td>LTP2</td>
<td>.960</td>
<td></td>
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</tr>
<tr>
<td>LTP3</td>
<td>.879</td>
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</tr>
<tr>
<td>LTP1</td>
<td>.854</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VC7</td>
<td>.730</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>VC6</td>
<td>.474</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VC1</td>
<td>.450</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Loadings < .30 are omitted.

Following the exploration of the factor structure using an oblique rotation method, one last factor analysis was conducted using the Varimax rotation method requesting three factors. Again, the decision to request three factors was based on the fact that the items were designed to measure three separate and unrelated constructs (likelihood to purchase, procedural justice, and value consciousness). The total variance extracted was 51.4% which is within the guidelines as suggested by Hair et al. (2010). The result of this orthogonal factor analysis, shown in Table 11, also has all of the value consciousness items loading on factor 3.
<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>PJ5</td>
<td>.750</td>
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<td></td>
</tr>
<tr>
<td>PJ3</td>
<td>.733</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ1</td>
<td>.718</td>
<td></td>
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</tr>
<tr>
<td>PJ2</td>
<td>.711</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ7</td>
<td>.709</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ6</td>
<td>.687</td>
<td></td>
<td></td>
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</tr>
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</tr>
<tr>
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<td>VC4</td>
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<td></td>
</tr>
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<td>VC1</td>
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</tbody>
</table>

Note. Loadings < .30 are omitted.

Table 11. Factor Analysis Using Varimax Rotation - Requesting 3 Factors

After this Varimax rotation, the first factor accounted for 22.3% of the variance, the second factor accounted for 14.6%, and the third factor accounted for 14.5%. The eigenvalues reported for three factors were 5.2, 3.1, and 1.7 respectively.

As previously stated, the value consciousness scale has been used in earlier research, is an established scale, and in the current research has a satisfactory Cronbach’s Alpha of .77 (see Table 12). Hair et al. (2010) suggest a lower limit of .70 for Cronbach’s alpha when assessing scale consistency. However, several of the questions may be considered complex in that they are presented in two parts. For example, VC5 reads “I generally shop around for lower prices on products, but they still must meet certain quality requirements before I buy them.” Questions with loadings of .30 or higher
on more than one factor are often considered to be *complex* items (Thurstone, 1947). Additionally, several of the questions relate to grocery shopping either explicitly or implicitly. This may have affected the answers given since the sample was comprised of college students who are not typically frequent grocery shoppers. Further examination of the scale items showed the item-to-total correlations exceeded .5, which Hair et al. (2010, p. 125) state is the minimum threshold for internal consistency.

Following the factor analysis, the suitability of creating summated scales for the customized likelihood to purchase, as well as the value consciousness and procedural justice measures, was examined. To confirm that the likelihood to purchase items, if summed, would form a reliable scale, Cronbach’s alpha was computed. Hair et al. (2010) recommend a lower threshold for alpha of .70 as the criteria for acceptable reliability. The alpha for the likelihood to purchase scale items was .93, indicating that the items formed a scale with acceptable internal consistency reliability. The seven procedural justice scale items were also assessed for their suitability to form a summated scale. Cronbach’s alpha was computed for these scale items. The alpha for the seven scale items was .89, indicating that the procedural justice items also form a scale with satisfactory internal consistency reliability. Last, the seven value consciousness scale items were assessed for their appropriateness to combine into a summated scale. Cronbach’s alpha was computed for these scale items. The alpha for the seven scale items was .77, indicating that the value consciousness items form a scale with acceptable reliability. See Table 12 for a summary of computed Cronbach’s alphas for all scales.

<table>
<thead>
<tr>
<th></th>
<th>Likelihood to Purchase</th>
<th>Procedural Justice</th>
<th>Value Consciousness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s Alpha</td>
<td>.93</td>
<td>.89</td>
<td>.77</td>
</tr>
</tbody>
</table>

Table 12. Cronbach’s Alpha Summary for Scales
Descriptive Statistics

Means, standard deviations, and correlations for the measured variables are reported in Table 13. A more complete testing of the hypotheses will be conducted; however the results shown in Table 13 provide an initial glimpse at the hypothesized relationships. As predicted, positive eWOM is positively correlated with likelihood to purchase \( r = 0.331, p < 0.01 \) and procedural justice perceptions \( r = 0.336, p < 0.01 \). Additionally, negative eWOM is negatively correlated to likelihood to purchase \( r = -0.516, p < 0.01 \) as well as procedural justice perceptions \( r = -0.518, p < 0.01 \). Furthermore, procedural justice perceptions are positively correlated with likelihood to purchase \( r = 0.463, p < 0.01 \). Though not the primary focus of the current research, and included as curiosity items, there are also positive correlations between frequency of internet shopping and complaining behavior \( r = 0.239, p < 0.01 \) as well as complaining behavior and likelihood to purchase \( r = 0.180, p < 0.01 \).
<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. School Class</td>
<td>2.71</td>
<td>1.19</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Ethnicity</td>
<td>4.91</td>
<td>.69</td>
<td>-0.92</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. College Major</td>
<td>2.65</td>
<td>1.43</td>
<td>-0.242**</td>
<td>.061</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Net Shopping</td>
<td>2.81</td>
<td>1.00</td>
<td>0.050</td>
<td>-0.167*</td>
<td>-0.161*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Complainer</td>
<td>5.41</td>
<td>2.52</td>
<td>0.111</td>
<td>-0.033</td>
<td>-0.062</td>
<td>.239**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Pos eWOM</td>
<td>0.30</td>
<td>0.46</td>
<td>-0.131*</td>
<td>-0.024</td>
<td>0.025</td>
<td>0.028</td>
<td>0.092</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Neg eWOM</td>
<td>0.32</td>
<td>0.47</td>
<td>0.217**</td>
<td>-0.030</td>
<td>0.017</td>
<td>-0.039</td>
<td>-0.109</td>
<td>-0.453**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Pro Justice</td>
<td>2.87</td>
<td>0.83</td>
<td>-0.109</td>
<td>0.039</td>
<td>0.021</td>
<td>0.048</td>
<td>0.114</td>
<td>.336**</td>
<td>-0.518**</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Value Cons</td>
<td>5.55</td>
<td>0.97</td>
<td>0.021</td>
<td>0.020</td>
<td>0.081</td>
<td>0.039</td>
<td>0.093</td>
<td>0.056</td>
<td>0.037</td>
<td>0.151*</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>10. LTP</td>
<td>2.92</td>
<td>1.63</td>
<td>-0.101</td>
<td>0.030</td>
<td>0.044</td>
<td>0.022</td>
<td>0.180**</td>
<td>.331**</td>
<td>-0.516**</td>
<td>.463**</td>
<td>-0.012</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*p < .05  
**p < .01
Table 13. Descriptive Statistics and Correlations
Hypothesis Testing

The first hypothesis states that the type of eWOM message will affect likelihood to purchase. Specifically, it is predicted that negative eWOM will negatively impact likelihood to purchase. A one-way ANOVA was conducted to examine whether there were statistically significant differences between the mean likelihood to purchase scores in the three eWOM treatment conditions. The results shown in Table 14 show a statistically significant difference among the treatment conditions, \( F(2,223) = 42.93, p < .001 \).

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>166.066</td>
<td>2</td>
<td>83.033</td>
<td>42.925*</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>431.367</td>
<td>223</td>
<td>1.934</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>597.433</td>
<td>225</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**\( p < .001 \)

Table 14. ANOVA – Likelihood to Purchase Dependent Variable

Scheffé’s post-hoc test was then performed to assist in locating and identifying the significant differences. The Scheffé procedure is reported to be among the most conservative methods of assessing differences in group means (Hair et al., 2011; Scheffé, 1953). The results are shown in Table 15.
The results indicate no significant mean difference between the no eWOM (absence of any eWOM) and the positive eWOM conditions. However, there does appear to be a significant difference in means between the positive eWOM and negative eWOM conditions as well as between the no eWOM and negative eWOM conditions.

Based on the analysis of the data, it appears that negative eWOM has a greater impact on consumer likelihood to purchase than does positive eWOM. Additionally, the absence of any significant mean difference in likelihood to purchase between those respondents who received no WOM and those that received positive eWOM shows that positive eWOM in this study did not significantly influence consumer likelihood to purchase. These results demonstrate support for the first hypothesis in that the results indicate that negative eWOM messages are significantly and negatively related to likelihood to purchase.
Hypothesis 2 predicts that negative eWOM messages will be negatively related to procedural justice perceptions. A one-way ANOVA was conducted to examine whether there were statistically significant differences between the mean procedural justice scores in the three eWOM treatment conditions. The results presented in Table 16 show a statistically significant difference among the treatment conditions: $F(2, 223) = 43.56, p < .001$.

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>43.575</td>
<td>2</td>
<td>21.788</td>
<td>43.56**</td>
</tr>
<tr>
<td>Within Groups</td>
<td>111.540</td>
<td>223</td>
<td>.500</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>155.115</td>
<td>225</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**$p < .001$  
Table 16. ANOVA – Procedural Justice Dependent Variable

Scheffe’s post-hoc test was then performed to assist in locating and identifying the significant differences. The results displayed in Table 17 indicate no significant mean difference between the no eWOM and the positive eWOM conditions. However, there does appear to be a significant difference in means between the positive eWOM and negative eWOM conditions as well as between the no eWOM and negative eWOM conditions. These results are similar to those found when examining the eWOM to likelihood to purchase relationship. Positive eWOM, containing information about the procedural justice of the firm, did not significantly impact the consumer’s perception of the fairness of the firm. However, negative eWOM messages did significantly affect consumer perceptions of the justice of the firm. These results indicate support for Hypothesis 2, which hypothesizes that negative eWOM messages will be negatively related to procedural justice perceptions of the firm.
To test Hypothesis 3, a regression analysis was conducted with procedural justice perception predicting likelihood to purchase. The results presented in Table 18 indicate that consumer procedural justice perception is a significant predictor of consumer likelihood to purchase. The R² of .215 indicates that 22% of the variance in consumer likelihood to purchase is predicted by consumer procedural justice perception. Since the relationship is positive, we can predict that higher consumer procedural justice perception will generally be associated with higher consumer likelihood to purchase. Furthermore, lower consumer procedural justice perception will generally be associated with lower consumer likelihood to purchase. These findings provide support for Hypothesis 3, which hypothesizes that negative perceptions of the procedural justice of the firm will be negatively related to consumer likelihood to purchase.
The current research results indicate that there is a relationship between eWOM and likelihood to purchase (H1). Furthermore, the data suggest a relationship exists between eWOM and procedural justice (H2). Last, results in Table 18 show a significant relationship between procedural justice and likelihood to purchase (H3). In order to investigate the extent that procedural justice accounts for the eWOM – likelihood to purchase relationship, Baron and Kenny’s (1986) mediated regression analysis was utilized. A regression equation was specified with eWOM and procedural justice predicting likelihood to purchase. The results presented in Table 19 show that when both of these variables are entered simultaneously, only procedural justice still significantly predicts likelihood to purchase. The findings suggest that the effect of eWOM on likelihood to purchase may be due to the procedural justice perceptions created by the eWOM treatment received by the study participants. Therefore, the relationship between eWOM and likelihood to purchase is fully mediated by perceptions of procedural justice.
Hypothesis 4 predicts that as value consciousness increases, the relationship between consumer perceptions of procedural justice and consumer likelihood to purchase will be positively affected. In order to test this hypothesis an interaction term was created (procedural justice * value consciousness) and new regression models were specified. The results are shown in Tables 20 and 21. The addition of the interaction term did not significantly improve the prediction of Model 1. In fact, the adjusted $R^2$ decreased after introduction of the interaction term, indicating that the added variable has little explanatory power in the regression equation. Additionally, before the interaction term is included in the regression model, procedural justice is significantly contributing to the equation for predicting likelihood to purchase. Value consciousness does not appear to have a significant effect on the procedural justice to likelihood to purchase relationship. Hypothesis 4 is not supported.

Table 20. Model Summary with Inclusion of Interaction Term

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.180</td>
</tr>
<tr>
<td></td>
<td>eWOM</td>
<td>.076</td>
</tr>
<tr>
<td></td>
<td>PJ Summated</td>
<td>.903</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Likelihood to Purchase Summated

Note: $R^2 = .216; F(2,223) = 30.74, p < .001

Table 19. Regression Results for eWOM and Procedural Justice Predicting Likelihood to Purchase

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R Square Change</td>
<td>F Change</td>
<td>df1</td>
<td>df2</td>
<td>Sig. F Change</td>
</tr>
<tr>
<td>1</td>
<td>.471$^a$</td>
<td>.222</td>
<td>.215</td>
<td>1.44413</td>
<td>.222</td>
</tr>
<tr>
<td>2</td>
<td>.471$^b$</td>
<td>.222</td>
<td>.211</td>
<td>1.44734</td>
<td>.000</td>
</tr>
</tbody>
</table>

Dependent Variable: Likelihood to Purchase Summated

a. Predictors: (Constant), PJ Summated, Value Consciousness Summated
b. Predictors: (Constant), PJ Summated, Value Consciousness Summated, PJ*VC Interaction Term

Table 20. Model Summary with Inclusion of Interaction Term
### Summary

A summary of the research findings is presented in Table 22. Chapter 5 will discuss the implications of the research findings as well as the limitations of the present research. Directions for future research and research opportunities will then be discussed.
Hypothesis 1: Negative eWOM messages, conveyed via online consumer review sites and anti-brand sites, will be negatively related to consumer likelihood to purchase.

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Dependent Variable</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative eWOM</td>
<td>Likelihood to Purchase</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Hypothesis 2: Negative WOM messages will be negatively related to consumer perceptions of the procedural justice of the firm when the firm is perceived to be the source of the injustice and the firm’s employee(s) are the victim(s).

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Dependent Variable</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative eWOM</td>
<td>Procedural Justice</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Hypothesis 3: Negative consumer perceptions of the procedural justice of the firm, when the firm is perceived to be the source of the injustice and the firm’s employee(s) are the victim(s), will be negatively related to consumer likelihood to purchase.

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Dependent Variable</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedural Justice</td>
<td>Likelihood To Purchase</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Hypothesis 4: Value consciousness will moderate the relationship between consumer perceptions of procedural justice and consumer likelihood to purchase such that the relationship will be positively affected as value consciousness increases.

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Dependent Variable</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedural Justice * Value Consciousness</td>
<td>Likelihood to Purchase</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>

Table 22. Summary of Findings
CHAPTER 5

IMPLICATIONS, LIMITATIONS, AND FUTURE RESEARCH

Word-of-mouth communication has occurred among people for as long as there have been people. Day (1971) reported that word-of-mouth communication is nine times as effective as advertising at changing predispositions, and he suggested that word-of-mouth is an important product success factor. Researchers, however, have differed on the effects of positive and negative uncontrolled marketing communications on consumers. Laczniak et al. (2001) found that strong and convincing negative word-of-mouth can have a negative effect on brand evaluations. Other researchers have stated that a limited quantity of negative word-of-mouth messages among a much larger amount of positive word-of-mouth was not decisively harmful (Doh & Hwang, 2009). Chevalier and Mayzlin (2006) found that the impact of negative consumer reviews on book sales was greater than for positive reviews.

Though differing somewhat on the impact of eWOM, marketing scholars widely agree that research into electronic word of mouth communications is both important and timely (Campbell, Pitt, Parent, & Berthon, 2011b; Porter & Golan, 2006; Strutton et al., 2011). The rapid evolution and proliferation of Web 2.0 platforms, which facilitate bi-directional communication between firms and consumers as well as among consumers outside of the firm’s control, make this an important area of academic study. It is certain
that the velocity of research into this area of uncontrolled marketing communications will increase in the coming years.

While word-of-mouth has been an important research topic among marketers, the management literature is replete with organizational justice studies. Most of this research has concerned itself with justice as an internal issue of the firm. These justice studies frequently have the employee as the target of the justice and the supervisors or the firm as the source (Arnold & Spell, 2006; Cobb et al., 1997). However, recent justice research has explored the justice perceptions of third parties who may care about, and react to, the unethical behavior of others (Cropanzano et al., 2003; Rupp & Bell, 2010). This concept has been labeled a deontic justice perspective. The current research takes the deontic justice perspective outside of the firm and measures its impact on third party stakeholders, specifically consumers. This interdisciplinary research was conceptualized and designed to incorporate well-researched concepts from different disciplines so as to create new knowledge for both management and marketing scholars and practitioners.

The intent of this research was to explore and test the impact of eWOM on consumer perceptions of the justice of the firm toward its employees and ultimately how eWOM might impact a consumer’s likelihood to purchase. Specifically, this research was designed to explore three research questions:

RQ1: What is the impact of negative electronic word of mouth on consumer’s purchase intentions?

RQ2: What role do consumer’s perceptions of a firm’s fair treatment of its employees play in the consumer’s purchase intentions?
RQ3: Do electronic word of mouth messages, uncontrolled by the firm, have an impact on consumer perceptions of the fairness of the firm toward its employees?

To my knowledge, this research is the first to include both consumer review and anti-brand sites to create eWOM conditions. Earlier research has incorporated one or the other, and, because of the length of time they have been in use, consumer review sites have received the bulk of the attention. Yet, anti-brand sites are becoming more prevalent and are a rapidly developing source of eWOM.

Research Results Discussion

The results of the data analysis show that those study participants who were in the negative eWOM condition were less likely to purchase the specified product from the firm. Additionally, there were no significant mean differences between the no eWOM condition respondents and the positive eWOM respondents. These findings indicate that the negative eWOM condition had a greater impact on likelihood to purchase than did the positive eWOM condition.

Somewhat similar results emerged when testing the relationship between eWOM and procedural justice perceptions. There were significant mean differences between the positive and negative eWOM conditions, but no significant difference detected between the respondents in the no eWOM and the positive eWOM condition. There was, however, a significant difference between the no eWOM and negative eWOM conditions. These findings indicate that the negative eWOM condition impacted procedural justice perceptions more than the positive eWOM condition.

In testing the influence of procedural justice perceptions on likelihood to purchase, the results indicate that consumer justice perceptions are a significant predictor
of consumer likelihood to purchase. This finding is noteworthy and provides preliminary evidence that this relationship is important and worthy of further study. The research findings also suggest that the effect of eWOM on likelihood to purchase may be due to the procedural justice perceptions created by the eWOM treatment conditions. This study provides evidence that procedural justice perception has a powerful influence on consumer likelihood to purchase and procedural justice was identified as a significant mediator in the eWOM to likelihood to purchase relationship. Furthermore, the results lend support to the deontic justice research that has appeared in the management and psychology literature in recent years. The deontic justice perspective argues that people may not respond to perceived injustice based entirely on self-interest and may have significant reactions to what they consider to be right and fair (Cropanzano et al., 2003; Rupp & Bell, 2010). Additionally, individuals may have a strong desire to not only be treated fairly themselves but for others to be treated fairly as well. Most deontic justice research has been centered in the workplace. The current research removes the deontic justice perspective from the workplace and into the marketing arena.

The negative eWOM condition showed relatively more strength than the positive eWOM in this study. One possible reason for the strength of the negative eWOM condition may lie in the structure of the research instrument. The consumer decision making process is typically conceptualized as a five step process: need recognition, information search, evaluation of alternatives, purchase, and post purchase behavior (Bettman, Johnson, & Payne, 1991; Lamb, Hair, & McDaniel, 2013). The current research asked the respondents to consider the purchase of an athletic shoe, which was the only shoe specified to be included in their consideration set. Additionally, the athletic shoe was a fictional brand. Therefore, the study participants would have had no brand
loyalty to the stimulus. If a study participant was mentally brand loyal to a particular brand of athletic shoe (e.g., Nike, Converse) before completing the instrument, he/she may have been unconsciously looking for reasons to exclude the specified shoe. This might have made the respondents more susceptible to the negative condition messages. Furthermore, the positive condition messages conveyed to the respondents may not have been powerful enough for the fictional shoe to gain entry into their consideration set if it had not been specified at the beginning of the study. These could be legitimate criticisms of the study and the findings. However, if the research instrument had included a lengthy information search on several different athletic shoes, it would have created an instrument that would have been very lengthy and complicated. According to Dillman et al. (2009), a short and easy to complete questionnaire reduces the perceived cost of responding and can increase response rates. Therefore, the research instrument was designed to provide easy to answer formats and to make the cost (time) to respond low.

Interestingly, value consciousness did not have the predicted effect on the procedural justice and likelihood to purchase relationship. Value consciousness scores, which were measured on a 7-point scale (1 = strongly disagree, 7 = strongly agree), contained little variability (See Figure 3). The mean score of 5.5 with a standard deviation <1 (0.971) indicate that the respondents were fairly consistent in their opinions of their personal value consciousness. This could be a result of using a college student sample that is, by and large, currently operating on a fixed income and, by necessity, value conscious. Additionally, the value consciousness scale contains several questions that either explicitly reference grocery shopping or reference activities that often occur while grocery shopping (e.g., comparing price per ounce information). Therefore, the
scale may not have been as salient to this sample as it would be to another sample with different characteristics.

Figure 3. Value Consciousness Summated Scores

Implications for Business and Academia

This research demonstrated the strength of negative eWOM to negatively impact consumer’s likelihood to purchase from the firm as well as their procedural justice perceptions of the firm. Interestingly, those respondents receiving no eWOM messages did not significantly differ in their likelihood to purchase or in their procedural justice perceptions from those receiving the positive eWOM messages. Furthermore, while negative procedural justice perceptions did have a negative impact on likelihood to purchase positive procedural justice perceptions did not have a significant impact. Overall, the negative condition produced more impactful results on the dependent variables than did the positive conditions.
Based on these findings, it appears that firms might be better served by concentrating on mitigating negative eWOM, rather than spending scarce resources on increasing positive eWOM. This would apply to eWOM concerning the product as well as the justice of the firm. In an effort to maintain the source credibility of the consumer review forums, both the positive and negative forums contained a minority of negative and positive comments respectively. This would indicate that aggressive mitigation of negative eWOM might not be necessary to improve likelihood to purchase. Aggressive techniques by the firm could reduce the influence of the consumer forum, resulting in possible abandonment by consumers while not having a measurable impact on purchases. The strength of negative eWOM shown in this research indicates that close monitoring of consumer eWOM merits the firm’s attention.

This interdisciplinary research explored how consumer perceptions of the fairness of the firm might impact their likelihood to purchase from that firm. While organizational justice studies appear frequently in the management and psychology literatures, this research is the first to study the impact justice perceptions have on consumer’s likelihood to purchase from that firm. Generally, justice research is concerned with the employer - employee relationship. In this relationship, the employee is affected by, and sensitive to, the perceived fairness of the firm toward him/her. These fairness perceptions are influenced by company policies and procedures as they relate to employee pay, benefits, performance appraisals, restructuring, etc. When a deontic perspective is incorporated into justice research, it frequently focuses on third parties within the firm (e.g. other employees). The current research takes the justice of the firm toward its employees outside of this employer – employee dyad and seeks insights as to what impact it might have on consumers and their likelihood to purchase from the firm.
Previous research has not explored this important justice construct as it relates to a third party consumer and his/her likelihood to purchase.

Word-of-mouth communications (both offline and online) tend to be viewed by consumers as more reliable than firm-generated messages (Grewal, Cline, & Davies, 2003). With the recent explosion of new and effective ways to share word-of-mouth communication via Internet platforms, information about the inner workings of the firm is becoming widely disseminated. This includes human relations issues that in the past may have been more difficult to discover, confirm, and share with others. The firm’s policies, procedures, and actions as they affect employees are no longer contained within the firm and are widely shared by those affected and by third party observers who may not be directly affected. This research finds that negative eWOM messages were negatively related to the procedural justice perceptions of the firm. Furthermore, procedural justice perceptions were found to be a predictor of consumer likelihood to purchase. Therefore, in addition to justice as it relates to employee motivation, retention, and productivity, the current research findings demonstrate the importance of justice perceptions on third party consumers and their likelihood to purchase. The findings point to an opportunity for synergy within the firm between management and marketing that could be impactful to firm sales. By reducing silos and sharing information, a significant improvement in revenue could be realized.

Limitations and Future Research Opportunities

This research provides important insights into the millennial demographic cohort (born 1981-2000) however that is also one of its limitations. Marketing researchers have long used samples comprised of college students (See Peterson, 2001 for a meta-analysis
of using students as surrogates for consumers). This research also made use of a student sample. However, that resulted in a fairly homogeneous set of respondents.

Furthermore, the student population used in the research comes primarily from the Southeast United States, and these students may not be representative of college students from other regions of the country. Replicating the study using a student sample drawn from an institution where the student population is more diverse and/or a non-USA student sample with a more collectivist mindset could produce results that, when combined with the current research results, may create a richer picture of the proposed relationships. Thus, even though college students are consumers, the use of a student sample may limit the generalizability of the current findings.

As well, the value consciousness construct did not produce a significant interaction in the justice and likelihood to purchase relationship. A more heterogeneous sample might produce more variability and provide additional insights that this research was not able to accomplish. Further research into the literature may produce a construct that would moderate the justice and likelihood to purchase relationship. Additional qualitative research could possibly lead to a theoretically based construct that would provide a meaningful interaction.

The messages included in the consumer review forums and on the anti-brand sites were intended to be viewed together to create the treatment conditions. It would be useful in future research to try and identify if one type of message was more influential than another. This could assist marketers and managers in identifying which type of eWOM might be more damaging or helpful to the firm. Furthermore, both the consumer review forum and the anti-brand site created for the study were comprised of positive and negative messages from individuals unknown to the study participant. Perhaps future
research could investigate other platforms (e.g. Twitter, Facebook) that contain eWOM from individuals who are known to the respondent.

The correlation table shows positive correlations between frequency of internet shopping and complaining behavior, as well as complaining behavior and likelihood to purchase. These items were not specified in the model but were included in the research instrument as items of potential interest. Further investigation of these relationships may hold promise for future research that can aid in creating a more complete understanding of consumer motivations to purchase. A consumer who is prone to complain may in fact be a more engaged consumer and consider themselves to be helping the firm to succeed.

Finally, research on anti-brand websites is scarce and fragmented. While the current research included anti-brand websites so as to trigger justice concerns, there is very little understanding as to the overall role of such sites in the consumer purchase decision process. As well, these sites might have an impact on a company’s mode of entry into new and emerging markets. Thus, research focusing specifically on the anti-brand website is clearly warranted so as to better understand its role in integrated marketing communications.

Conclusions

As previously noted, scholars have encouraged researchers to create new knowledge by combining existing knowledge across different fields of study (Colquitt & George, 2011; George et al., 2008). Additionally, management and marketing scholars have encouraged research across disciplines (Crittenden, 2005; Heath & Sitkin, 2001). Furthermore, many, if not most, actual business issues are multi-disciplinary. This research responds to the call from academics, and the need of practitioners, by providing this new, cross disciplinary empirical research.
Exploring the fast moving and quickly changing landscape of uncontrolled marketing communications will become increasingly important over the next decade. Scholars can assist the wider business community by studying these communications and their impact on many different aspects of the firm’s operations. This research introduced the justice of the firm into the consumer likelihood to purchase process. The results demonstrate that, while the product is important, how consumers perceive the firm’s treatment of its employees is also important.
REFERENCES


Figure 1. Conceptual Model
Figure 2. Operational Model
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Table 8A. Rotated Factor Matrix Using Varimax Rotation.
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Table 9A. Rotated Factor Matrix Using Promax Rotation Method
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Table 10A. Rotated Factor Matrix
Using Promax Rotation Requesting 3 Factors
Rotated Factor Matrix

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Table 11A. Rotated Factor Matrix
Using Varimax Rotation Requesting 3 Factors
RESEARCH STUDY:

This project is part of my research requirement to earn my Doctor in Business Administration (DBA) degree at Kennesaw State University. The study seeks to discover insights, from a consumer’s perspective. I hope to study these consumer insights and use them to contribute knowledge both to academia and to the business community. All participants who complete the questionnaire, and choose to participate, can enter a drawing for a $100.00 cash prize. Additionally, your opinions, perceptions, and experiences will contribute to advancing knowledge within the areas studied. Please be assured that all answers are confidential and your identity is anonymous.

Before participating in the study you should read this form and feel free to contact me about anything you do not understand. Should you voluntarily agree to participate in this study, you will be asked to complete a questionnaire. The completion of the questionnaire will take approximately 15 minutes. The questionnaire includes some scenarios and other materials that you will be asked to read. Additionally, the instrument will ask some direct questions and it is very important that you answer the questions thoughtfully and honestly. There are no correct or incorrect answers. Data collected online will be handled in an anonymous manner and Internet Protocol addresses WILL NOT be collected by the survey program. All participants in this study must be 18+ years of age. There are no risks or benefits (other than a voluntary cash prize drawing) for you in participating in this survey. Should you choose to enter the prize drawing you can click on the link provided after the research instrument is completed. This link will redirect you to a separate instrument where you can enter your contact information. Your contact information is completely separate from your responses to the prior questions. You may choose to participate or not. You may stop at any time. If you do participate, completion and submission of the survey indicates your consent to the above conditions.

Research at Kennesaw State University that involves human participants is carried out under the oversight of an Institutional Review Board. Questions or problems regarding these activities should be addressed to the Institutional Review Board, Kennesaw State University, 1000 Chastain Road, #0112, Kennesaw, GA 30144-5591, (678) 797-2268.

Research at Berry College that involves human participants is carried out under the oversight of an Institutional Review Board. Questions or problems regarding these activities should be addressed to Faculty Research and Sponsored Programs, Berry College, P.O. Box 495006, Mount Berry, GA 30149, (706) 290-2163.

Thank you in advance for your time and participation. Your opinions are greatly appreciated and valuable to my research.

David L. Williams

☐ I agree and give my consent to participate in this research project. I understand that participation is voluntary and that I may withdraw my consent at any time without penalty.

☐ I do not agree to participate and will be excluded from the remainder of the questions.
INSTRUCTIONS

1. The pages that follow contain questions and scenarios that you are asked to carefully read. If given a scenario it is critical that you put yourself in the situation prescribed by the survey instrument. Then please answer all of the questions candidly.
2. Please answer all of the questions given. You will have an opportunity at the end to provide any comments you would like to make.
3. Your responses are guaranteed anonymity. No effort will be made to link you to your responses and all data will only be reported in the aggregate.

Thank you very much for help on this project

Researcher

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Use the scale provided (1 = strongly disagree, 7 = strongly agree) to indicate your agreement or disagreement with each statement as it pertains to you.

**Value Consciousness** - (Lichtenstein et al., 1990)

1. I am very concerned about low prices, but I am equally concerned about product quality.
2. When grocery shopping, I compare prices of different brands to be sure I get the best value for the money.
3. When purchasing a product, I always try to maximize the quality I get for the money I spend.
4. When I buy products, I like to be sure that I am getting my money’s worth.
5. I generally shop around for lower prices on products, but they still must meet certain quality requirements before I will buy them.
6. When I shop, I usually compare the “price per ounce” information for brands I normally buy.
7. I always check prices at the grocery store to be sure I get the best value for the money I spend.

1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
Consumer Purchase Scenario

In this study, you are asked to assume that you are a consumer who is in the market for a pair of athletic shoes. These are general purpose athletic shoes and not specifically made for a particular activity or sport. The shoe is a new offering from an established company headquartered in the United Kingdom. The brand, while not new, is new to the U.S. market. It is competitively priced at $84.99 and you have decided that the shoe presented will be in your consideration set as you prepare to make a shoe purchase.
Controlled Marketing Message

Introducing the U.S. to the Pegasus XR.

Engineering and experience developed in the United Kingdom has resulted in cutting edge technology enabling the Pegasus XR to hug the foot while offering unparalleled support and stability. The Pegasus XR is ultra light yet extremely durable.

The Pegasus XR is almost completely customizable. You choose the inner and outer shoe color and color style, sole color, sole cushioning preference, lace color plus many more customizable options. The Pegasus XR is available in almost every size and width. Competitively priced at $84.99.
The following online forum web page provides a platform for anonymous comments about the Pegasus XR athletic shoe and the Pegasus Company. Take a minute or two to read and consider the information.

**Positive eWOM**

ShoeboxReviews.com
Consumer Reviews
Pegasus XR Athletic Shoe
5 Star Rating Scale: 1 = Poor & 5 = Excellent

1. **R. Brooks:** The Pegasus XR is a great fitting shoe. The support was as good or better as what I am used to in other similar shoes I own. I will definitely pick up another pair of the XRs. *4 out of 5 stars.*

2. **Ajit:** I bought these for my husband. I think he was expecting another brand of shoe. They did have his size but he rarely wears them. Maybe not the best choice. *2 out of 5 stars*

3. **Big Red One:** Comfortable, affordable, great for running or walking or just beating around on the weekend. Also a big fan of the company. *5 out of 5 stars.*

4. **Britt:** Bought a pair after seeing the 60 Minutes piece about how well they treat their employees. The Pegasus XR seems to be a bit more substantial, even though lighter, than other shoes I have purchased. A heavy user will appreciate the support. So far I think they are fantastic. *4 out of 5 stars*

5. **PressToPlay:** I wore the Pegasus XRs the day after I received them. Very comfortable and my customization looked great! *5 out of 5 stars.*

6. **JohnWL:** Nice looking but not very comfortable and not very well made. The toe box is also too small. Might want to make a different choice. *1 out of 5 stars.*

7. **ABB:** The Pegasus XR lasts quite a while before showing any wear. And I wear them all the time. I suffered from shin splints before getting these XRs and my physician said the Pegasus shoe has helped considerably. Possibly the best choice of athletic shoes I have ever made. *4 out of 5 stars*
The following web page provides a platform to share information about the Pegasus XR athletic shoe and the Pegasus Company. Take a minute or two to read and consider the information contained on this home page.

Pro Brand Website Positive eWOM

PEGASUSISUS.ORG

An unofficial fan site for Pegasus enthusiasts everywhere!

About This Website
We have a passion for Pegasus athletic shoes and Pegasus the company. We admire the way the company brings people together. We like the conversations around it. We like being able to have a common ground to connect with people about. Why this site? We wanted to create an online community. We are not the first fan based Pegasus site and probably won’t be the last. There are official Pegasus sites and blogs. But we felt like an independent place with a dash of fun, education, cutting edge information (if we have it!), and real people talking to each other about Pegasus was still needed on the web. Maybe we were wrong. However, it has been three years since we began and visitors continue to come to the site. Maybe we’ll have to ponder the importance of this site on our next run wearing a quality pair of Pegasus athletic shoes!

For each pair of Pegasus XR shoes purchased this year – Pegasus will donate $10 to the local food bank that serves your zip code!

Pegasus Designates Two Board Of Directors Seats For Employee Representatives.

Full CNBC Story

Pegasus voted Top 10 Best Places to Work for 10th Consecutive Year!

Forward: How Pegasus Wins the Race Without Losing Its Soul

Premieres on HBO later this year!

Consumer Reports Ranks The Pegasus XR A Top 3 Athletic shoe for 2013!
The following online forum web page provides a platform for anonymous comments about the Pegasus XR athletic shoe and the Pegasus Company. Take a minute or two to read and consider the information.

**Negative eWOM**

ShoeboxReviews.com  
Consumer Reviews  
Pegasus XR Athletic Shoe  
5 Star Rating Scale: 1 = Poor & 5 = Excellent

1. **R. Brooks:** The Pegasus XR is a slightly oversized shoe. I always buy size 11 but these size 11 shoes were a little big on me. The support was also not as good as I am used to in other similar shoes. I would pick something else. **1 out of 5 stars.**

2. **Big Red One:** Comfortable, affordable, great for running or walking or just beating around on the weekend. **4 out of 5 stars.**

3. **Ajit:** I bought these for my husband. I think he was expecting another brand of shoe. They did have his size but he rarely wears them. Also not a big fan of the company. **2 out of 5 stars**

4. **Britt:** The Pegasus XR seems to run a bit wider than other shoes I have purchased. A heavy user would want more support I think. **2 out of 5 stars**

5. **JohnWL:** Nice looking but not very comfortable and not very well made. The toe box is also too small. Might want to make a different choice of shoe and company! **2 out of 5 stars.**

6. **PressToPlay:** I wore the Pegasus XR the day after I received them. Very comfortable and my customization looked great! **5 out of 5 stars.**

7. **ABB:** The Pegasus XR did not last very long before showing damage. I also got shin splints, which my physician said could be attributed to the shoe. Not the best choice of athletic shoe I have ever made. **1 out of 5 stars**
The following web page provides a platform to share information about the Pegasus XR athletic shoe and the Pegasus Company. Take a minute or two to read and consider the information contained on this home page.

Anti-Brand Site Negative eWOM

PEGASUX.ORG

The premise of this site is simple; we hate Pegasus the company, and its shoes! There are other Pegasus hate sites out there, but this one is unique. This site will bring you the latest Pegasus news, allow you to post your rant in the public forum, and give you a warm fuzzy feeling inside. This website is dedicated to giving a voice to Pegasus associates and consumers. You deserve to be heard!

READ ALL CURRENT EMPLOYEE LAWSUITS AT Pegasux/law.org

Forbes Rated as one of the Top 10 Corporate Hate Sites by Forbes in 2012 "A passionate critic of the U.K. ’s big boy manufacturer.” - Peter Griffen, The New Zealand Herald

STRIKING PEGASUS EMPLOYEES FIRED FOR ATTENDING ANNUAL STOCKHOLDER MEETING! For Full Story Click Here

Consumer Reports Ranks The Pegasus XR as WORST Shoe In Its Category For 2013.
Consumer Procedural Justice Perceptions

(Colquitt, 2001; Niehoff & Moorman, 1993) - Adapted

Keep in mind the consumer review forum and brand site you previously viewed. The following items refer to the procedures used by Pegasus to arrive at employee outcomes. Using the scale provided (1 = to a small extent, 5 = to a large extent), is it your perception that:

1. Pegasus employees are able to express their views about procedures used by the company to arrive at their outcomes?
2. Pegasus employees have influence over outcomes arrived at by the procedures used by the company?
3. Pegasus procedures are applied consistently across all affected employees?
4. Pegasus procedures are free of bias?
5. Pegasus collects accurate information in order to make job decisions?
6. Pegasus employees are allowed to challenge the job decisions made by the firm?
7. Pegasus procedures uphold ethical standards?

Scale

1 2 3 4 5
To A Small Extent To A Large Extent
Desire for Unique Consumer Products - (Lynn & Harris, 1997)

Using the five point scale provided (1 = strongly disagree, 5 = strongly agree), answer the following questions. Indicate your disagreement or agreement with each statement as it relates to you.

1. I am very attracted to rare objects.
2. I tend to be a fashion leader rather than a fashion follower.
3. I am more likely to buy a product if it is scarce.
4. I would prefer to have things custom-made than to have them ready made.
5. I enjoy having things that others do not.
6. I rarely pass up the opportunity to order custom features on the products I buy.
7. I like to try new products and services before others do.
8. I enjoy shopping at stores that carry merchandise that is different and unusual.

Scale

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td>Strongly Disagree</td>
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</table>
In which generational cohort do you consider yourself a member?

Select only one.

- Silent Generation (born 1925 - 1945)  _____
- Baby Boomer 1 (born 1946 - 1955)  _____
- Baby Boomer 2 (born 1956 – 1964)  _____
- Gen X (born 1965 – 1980)  _____
Likelihood to Purchase – Customized (Coyle & Thorson, 2001; Putrevu & Lord, 1994)

After considering the information you have viewed on the previous pages indicate your agreement or disagreement with each of the following statements. Use the seven point scale provided with 1=strongly disagree and 7=strongly agree.

1. It is very likely that I will buy the Pegasus XR.
2. I will purchase the Pegasus XR the next time I need a pair of athletic shoes.
3. I will definitely try the Pegasus XR.

All items measured on the following scale.

<table>
<thead>
<tr>
<th>1</th>
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<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
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Manipulation Check Embedded Question

Use the seven point scale provided with 1=strongly negative and 7=strongly positive.

Thinking about the information you have reviewed in this study. In your judgment, the consumer review forum and the brand web page contained a majority of information about the Pegasus XR shoe and the Pegasus Company that was:

1  2  3  4  5  6  7
Strongly Negative  Strongly Positive
Demographic Questions

Please respond to the following additional demographic questions. These questions will be used to analyze the results as a whole, not to identify any individual respondent.

What is your current classification? Choose Only One Category.

__ Freshman/first year of college
__ Sophomore
__ Junior
__ Senior
__ Completed Undergraduate Degree Not Currently Enrolled In Graduate School
__ Completed Undergraduate Degree And Currently Enrolled in Graduate School
__ Other

Ethnicity – Choose Only One Category

__ American Indian or Alaska Native
__ Asian
__ Black or African American
__ Native Hawaiian or Other Pacific Islander
__ White
__ Hispanic or Latino
__ Other
Your college major is based in which academic school or division? Choose only one answer.

__ Business

__ Education & Human Sciences

__ Humanities, Arts & Social Sciences

__ Mathematics & Natural Sciences

__ Nursing

__ Don’t Know

**Frequency of Internet Usage** - (Teo, 2001)

On average, how frequently do you use the internet for shopping activities?

1 – Never/almost never

2 – Less than once a month

3 – A few times a month

4 – A few times a week

5 – About once a day

6 – Several times a day

**Complainer or Non-Complainer** - (Bodey & Grace, 2007)

Select one of the following statements that is most applicable to you.

__ In most situations, I *tend* to complain to the provider when I am unhappy with the product or service, rather than doing nothing.

__ In most situations, I *don’t tend* to complain to the provider when I am unhappy with the product or service.