EGELN, LAURA, Ph.D. An Empirical Investigation of The Impacts of Website Quality on Consumer Loyalty: A Case of Baby Boomers (2015). Directed by Dr. Kittichai (Tu) Watchravesringkan. 219 pp.

Online shopping has become increasingly popular with sales of \$263 billion in 2013 an increase of 36% as compared to 2011 (www.Shop.org). However, consumer behavior that happens in the online channel is still under-researched due to the constant change that occur in the online channel (e.g., technological advances). The relationship between website quality, satisfaction, trust, and loyalty are not well understood.

However, such relationships among website quality, satisfaction, trust and loyalty on an online environment are sparse, indicating a need to further understand whether such relationships exist in an online shopping environment. Such relationships are important because they may aid in better understanding online consumers' decision-making process.

In addition, while most studies relating to online retail focus on younger users because they are first to adopt technology, online shopping behavior of the baby boomers is not well understood. This study attempts to provide an update and further extends consumer behavior literature by simultaneously examining factors that influence consumer loyalty in the online environment specific to the baby boomer cohort. Thus, the purpose of the study is to propose and empirically examine an integrative model of consumer loyalty within an apparel online shopping context with baby boomer online users. Specifically, the study seeks to 1) examine the associations between website quality dimensions and overall perceived website quality; 2) examine the relationship among overall perceived website quality, consumer satisfaction, and trust; and 3)

examine the associations between consumer satisfaction, trust, and consumer loyalty. The study's conceptual framework is derived from four different research streams; website quality (Wolfinbarger & Gilly, 2003), satisfaction (Oliver, 1981), trust (McKnight, Choudhury, & Kacmar, 2002), and loyalty (Dholakia & Zhao, 2010).

Data were collected via a self-administered questionnaire from an online panel called Amazon Mechanical Turk (mturk.com), which consists of panel members who agree to complete human intelligence tasks (HIT) that are requested by requestor. The survey was comprised of two qualifying questions indicating that those who participated in the final survey were a baby boomer and had purchased apparel online in the past six months. The study's final sample consisted of 169 responses. The majority of participants were female (73%), employed full-time (56%), and had an annual household income of \$30,001 - \$60,000 (32%). A principal component factor analysis with varimax rotation was performed on website quality items (e.g., system quality). As a result, two factors were chosen for system quality (i.e., web appearance and interactivity); two factors were selected for information quality (i.e., security and informativeness); and two factors were chosen for service quality (i.e., fulfillment and responsiveness). Confirmatory factor analysis via LISREL 8.8 using maximum likelihood estimation was subsequently performed to confirm the factor structure of website quality. To test all hypothesized relationships, we followed a two-step structural equation modeling approach.

Results revealed that system quality dimensions (web appearance and interactivity) did not positively impact overall perceived website quality. The information

quality dimension of informativeness did positively impact overall perceived website quality but information quality dimension of security did not positively impact overall perceived website quality. Service quality dimension of fulfillment did not positively impact overall perceived website quality but service quality dimension of responsiveness did positively impact overall perceived website quality.

In addition, results also showed that overall perceived website quality positively impacts trust, which in turn, influences loyalty in terms of WOM, repatronage intentions, and share of wallet. Furthermore, overall perceived website quality was found to positively influence satisfaction, but satisfaction was not found to positively influence trust. However, we only found that satisfaction positively influenced WOM and share of wallet but not repatronage intentions. Theoretical and managerial implications are provided. Limitations and future research directions are addressed.

AN EMPIRICAL INVESTIGATION OF THE IMPACTS OF WEBSITE QUALITY ON CONSUMER LOYALTY: A CASE OF BABY BOOMERS

by

Laura Egeln

A Dissertation Submitted to
the Faculty of The Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Greensboro 2015

Approved by

<u>Dr. Kittichai Watchravesringkan</u> Committee Chair I would like to dedicate this dissertation to my Lord and Savior, without His provisions and grace none of this would be possible.

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

	Committee Chair	
		Dr. Kittichai Watchravesringkan
	Committee Members	
		Dr. Nancy Hodges
		Dr. Gwendolyn O'Neal
		Dr. Hamid Nemati
Date of Acceptance by Committee		
June 23, 2015 Date of Final Oral Examination		

ACKNOWLEDGEMENTS

I am very thankful for this opportunity that has allowed me to pursue this educational endeavor. I would like to express my deepest appreciation and gratitude to my committee chair and mentor, Dr. Kittichai Watchravesringkan. Not only did you guide me through this process but your understanding and support during one of the toughest times of my life, saying goodbye to my mother in law, was beyond the call of duty and I am forever grateful.

I would also like to thank my committee members, Dr. Nancy Hodges, Dr. Gwendolyn O'Neal, and Dr. Hamid Nemati for all of their continuous support, valuable comments, critiques, and interests in my research. All of my committee members have been very supportive, encouraging, and patient especially with my geographical distance from campus and without that this dissertation wouldn't be possible.

Also, I would like to thank God for providing my family, friends, and work community who through their prayers, understanding, love, and patience supported me in this journey. To my amazing husband, Bill, without your unconditional support and love none of this would have been possible. To my wonderful daughters, Emily and Molly, thank you for being patient even when you didn't want to be while I followed where God was leading me. To my Grandpa Dave and Grandma Alice who never let me think that I couldn't accomplish anything I set my mind to. To my mother in law Doreen for all of your kind words of encouragement, I only wish I could have finished this before you had

to go. To my parents whose example of pursuing education while working and providing for a family did not go unnoticed.

To my closest friends, Julie and Kristen for always understanding and for not making me feel guilty. To my church family, thank you for understanding when I had to step back so that I could step up and focus. I would also like to thank Dean Malik and Dean Lehmuller for encouraging me to pursue this degree and providing resources to achieve it.

Finally, to all of the teachers I had throughout the years that poured themselves into teaching, and put up with all of my energy, your legacy is a great one. To all of my students, past and present, thank you for reminding me of what it is like to be on the other side. Being patient with me while I was studying and researching allowed you to support me when I should have been supporting you more, I greatly appreciate all of your kindness during this journey. It is because of what you showed me that encourages me to be a better professor, thank you!

TABLE OF CONTENTS

	Page
LIST OF TABLES	ix
LIST OF FIGURES	X
CHAPTER	
I. INTRODUCTION	1
Background	1
Development of Online Retailing	
Online versus Offline Shopping Experiences:	
Similarities and Differences	8
Online Consumers' Decision-Making Process	
Online Shopping Experiences and Generational Cohort	
Baby Boomer: The Potential Online Customer	14
Context of Study	18
Statement of Problem	20
Purpose of the Study	24
Significance of the Study	25
Definition of Key Terms	27
Organization of Chapters	29
II. LITERATURE REVIEW	31
Channel Development and Online Retailing	31
Assessing Website Quality	40
System Quality	46
Web Appearance	46
Interactivity	
Information Quality	
Informativeness	
Security	
Service Quality	57
Fulfillment	
Responsiveness	
Consumer Trust in the Online Environment	
Consumer Satisfaction	
Consumer Loyalty in the Online Environment	
WOM	70

Share of Wallet	71
Repatronage Intentions	
Proposed Conceptual Framework	
Hypothesis Development	
Summary	
III. RESEARCH METHODOLOGY	87
Research Purpose and Objectives	87
Instrument Development	
Measures	
Website Quality	
Overall Perceived Website Quality	
Consumer Satisfaction	
Trust	91
Consumer Loyalty	91
WOM	
Share of Wallet	92
Repatronage Intention	92
Demographic Information and General Questions	92
Sample and Data Collection Procedures	
Pretest	98
Sample	98
Data Collection Procedures	
Statistical Analysis	102
Summary	105
IV. RESULTS	106
Sample Characteristics	106
Participants' Online Behavior	
Validation and Purification of Constructs	
Website Quality	112
Scale Purification	
Measurement and Structural Models	123
Measurement Model	123
Assessment of Validity and Reliability	
Structural Model	
Test of Hypotheses	137
Summary	

V. DISCUSSION AND CONCLUSIONS	146
Discussion	146
Objective 1: Examining the Associations	
between Website Quality Dimensions and	
Overall Perceived Website Quality	146
Objective 2: The Examination of the Relationship	
among Overall Perceived Website Quality,	
Consumer Satisfaction, and Trust	152
Objective 3: Examining the Associations between	
Consumer Satisfaction, Trust, and Consumer Loyalty	154
Conclusions	157
Implications	164
Theoretical Implications	
Managerial Implications	169
Limitations and Suggestions for Future Research	173
REFERENCES	176
APPENDIX A. SURVEY	210
APPENDIX R IRR APPROVAI	217

LIST OF TABLES

	Page
Table 1. Definition of Key Terms	27
Table 2. List of Constructs	93
Table 3. Results of Qualification Survey	107
Table 4. Participants' Demographic Characteristics	109
Table 5. Descriptive Statistics and CFA Results for the Original 37-item 3-construct Model of Overall Perceived Website Quality	113
Table 6. CFA Results for the Revised 29-item 3-construct Model of Overall Perceived Website Quality	119
Table 7. Initial Measurement Model	124
Table 8. Revised Measurement Model	130
Table 9. Correlation Matrix for all Latent Constructs	136

LIST OF FIGURES

Page
Figure 1. Conceptual Model of Consumer Loyalty in Online Shopping Environment
Figure 2. Dollars Spent on Apparel in the Last Six Months (In Percentages)111
Figure 3. The Relationship between System Quality Dimension of Website Quality and Overall Perceived Website Quality
Figure 4. The Relationship between Information Quality Dimension of Website Quality and Overall Perceived Website Quality
Figure 5. The Relationship between Service Quality Dimension of Website Quality and Overall Perceived Website Quality140
Figure 6. The Relationship between Overall Perceived Website Quality and Consumer Satisfaction
Figure 7. The Relationship between Overall Perceived Website Quality and Consumer Trust
Figure 8. The Relationship between Consumer Satisfaction and Consumer Trust142
Figure 9. The Relationship between Consumer Satisfaction and Consumer Loyalty
Figure 10. The Relationship between Consumer Trust and Consumer Loyalty144
Figure 11. Model Predicting Loyalty145

CHAPTER I

INTRODUCTION

This chapter introduces the dissertation and includes the following sections: (1) Research Background, including information pertaining to the development of online retailing and online shopping experiences and generational cohort; (2) Context of the Study, (3) Statement of the Problem; (4) Purpose of the Study; (5) Significance of the Study; (6) Definition of Key Terms; and (7) Organization of Chapters.

Background

Development of Online Retailing

Online retailing is a growing category of business in the larger context of retailing that offers a great opportunity for companies and customers. Today's online retailing presents new challenges and continually change the way customers purchase merchandise (Li, Kuo, & Russell, 1999; Mukherjee & Nath, 2007). In addition, while most studies relating to online retail focus on younger users because they are first to adopt technology, online shopping behavior of the baby boomers is not well understood. This study attempts to provide an update and further extends consumer behavior literature by simultaneously examining factors that influence consumer loyalty in the online environment specific to the baby boomer cohort. Online shopping has become increasingly popular with sales of USD 263 billion for 2013, an increase of 36% as compared to 2011 (www.shop.org). Researchers have stated that there are a number of

factors (e.g., cost efficiencies, better communication and interaction between companies and consumers, and convenience) that enhance the presence of online retailing in the global commerce platform (Demangeot & Broderick, 2006; Dholakia & Zhao, 2010; Tam & Ho, 2005). It is commonly agreed that the ability of retailers to establish a presence in the online environment allows for a new channel of distribution; however, others have stated that online retailing is a disruptive innovation that alters traditional business model's use of new innovative users who leverage technology (Chang, Cheung, & Lai, 2005; Doherty & Ellis-Chadwick, 2010; Ganesh, Reynolds, Luckett, & Pomirleanu, 2010; Hofacker, 2008). With the advancement of technology, the physical existence of a store can be transformed to the virtual environment. Nevertheless, consumers' perceptions of online retailers are not well understood because of the store's location in the virtual environment.

According to the U.S. Census Bureau, records of e-commerce transactions can be broken down into four major categories: manufacturing, wholesale, services, and retail. Manufacturing transactions include any shipment that is ordered via the Internet and shipped to another business including Electronic Data Interchange (EDI) transactions. For example, in 2011, USD 2.7 trillion was reported for e-commerce shipments, which represented almost 50% of all manufacturing shipments in that year (www.census.gov). Another category of e-commerce is wholesale, including manufacturers' sales branches and offices, which accounted for USD 1.6 trillion in 2011. The third category is service e-commerce, which reported USD 346 billion in sales in 2011. Lastly, retail e-commerce reported USD 194 billion in sales in 2011 (www.census.gov). In addition, Amazon.com,

which offers numerous categories of merchandise, was projected to achieve USD 100 billion in sales by 2015; such projection in sales is considered a faster rate of growth than Walmart, one of the most successful U.S. retailers (IBM, 2012).

Recently, the retail industry has witnessed major changes with the introduction of the Internet and its implications for retail management, which have been driven not only by technology, but also by economic conditions, demographic changes, and consumer behaviors (Bart, Shankar, Sultan, & Urban, 2005; Kim & Forsythe, 2010). Online retailing is a growing channel of merchandise distribution that is constantly changing due to technological advances. Websites, the primary technology that connects consumers to the online retailing channel, communicate with consumers and send messages in order to achieve a desired outcome. In addition, when websites were initially developed, their main purpose was to provide information. However, as technology has developed and consumer behaviors have changed, the format and functions of websites have also changed to serve different purposes. According to Tam and Ho (2005), a website is defined as a stimuli-based decision-making environment, which includes text, images, audio, animations or video. Many websites not only offer information, but also provide transactional capabilities for purchasing products, engaging with sales associates, delivering customer service, and interfacing with supply chain partners. However, Basu and Muylle (2002) have reported that many consumers and companies did not have accurate information about the capabilities of the Internet. As a result, many companies developed marketing communications for online customers but delivered such strategies in the brick-and-mortar environment.

The Internet is an extremely large virtual environment that contains millions of pieces of information. In order for a customer to search information on the Internet, the information must be indexed, filtered, and retrieved in order to respond to the consumer's search. Websites are part of the Internet and the architecture includes several subsystems such as firewalls, web servers, transactional servers, application servers, database servers, and network infrastructure. However, the performance of the architecture of the Internet can decrease with increased web traffic (Namuduri & Ram, 2001). The size of the Internet, including the traffic and usage demands along with the volume of information presents a challenge for retailers.

In addition, the dynamics of e-commerce environment has grown significantly over the past decade which has changed the use of a website from just an informational site to a transaction portal, linking supply chain partners with customers (Dholakia & Zhao, 2010; Namuduri & Ram, 2001). According to Doherty and Ellis-Chadwick (2006), current online retailing research can be classified into three main categories: the retailer, the consumer, and the technology. However, Demangeot and Broderick (2006) posit that while many companies focus on the technology of the channel and not the shopping experience, online customers tend to focus on the shopping experience, not the technology. Wang (2003) further asserts that consumers are likely to struggle with "effective strategies to transact in a virtual world" (p.160), which coincides with a noted gap in literature in the Internet retailing that includes a lack of strategic perspective and implementation (Doherty & Ellis-Chadwick, 2006).

Kitchen and Blades (2002) state that consumers understand the infrastructure of brick-and-mortar stores and how to move through and engage with the structure of the store because of their previous experiences, use of navigational tools such as landmarks and guides, and their knowledge of their environment. That is, when a consumer goes into a mall for the first time, he/she does not have to learn how to move through the mall and engage with the retailers because his/her actions are based on previously experienced behaviors (Fisher &Unwin, 2002). In the virtual environment, on the other hand, the consumers' interactions are limited and there is a lack of consistency because of the vast size and volume of information within the Internet. Therefore, consumers may learn new experiences by relating to what they already know to guide them (Almousa, 2011). Furthermore, when shopping, consumers are more comfortable with a shopping context that is familiar to them such as experiences with brick-and-mortar and catalog retailers (Hopkins, Grove, Raymond, & LaForge, 2009). As such, consumers are likely to apply their experience to the online environment, minimizing the gap that may exist between the consumer and the product (Demangeot & Broderick, 2006). When individuals engage with a website, they tend to evaluate the site as they make certain decisions about the retailer and the product being offered. In many instances, consumers may have inadequate information about products and/or firm attributes to make an informed choice. As a result, consumers may depend on signals such as signs, symbols, and signifiers obtained from a website to help them in assessing the quality of merchandise and firm attributes (e.g., trust), which may subsequently influence their online shopping decisions (Biswas & Biswas, 2004).

Furthermore, online shopping tends to be associated with risk. According to the American Heritage Dictionary (1985), risk is defined as the possibility of suffering harm or loss and danger. There are risks specific to the online channel that do not exist in the brick-and-mortar channel because of the proximity of the consumer to the product, such as performance, time, and financial risk. Risk has been conceptualized as having two dimensions: the perceived (adverse) consequences of behavior and the likelihood or impact of their occurrence (Cox, 1967; Dowling, 1986). A study of online apparel shoppers revealed that time and performance risks are the most significant risks, influencing intention to purchase online, followed by privacy and social risks (Almousa, 2011). Halaweh and Kamoun (2012) also found that risk is part of information content where a vendor discloses information that relates to financial risks and product. A number of researchers suggest that consumers utilize the information available to them to make purchase decisions (Almousa, 2011; Bonifield, Cole, & Schultz, 2010; Park, Lee, & Ahn, 2004; Paylou, 2003; Wood, 2001). The gap associated with the inability of the consumer to engage with the physical product when shopping online causes a perception of greater risk than in a brick-and-mortar setting (Cheng, Wu, & Yen, 2009). Risks include regret over a purchase and credit card fraud that is perceived as a financial risk for many online consumers (Almousa, 2011). These risks increase the perception of complexity of purchasing in the online channel, reducing the desire to purchase and overcome the difficulties (Johnson, Lennon, Jasper, Damhorst, & Lakner, 2003). In addition, one of the reasons that purchasing in the online environment is perceived as complex is because the amount of information that exists; the consumer utilizes such

information differently when compared to the physical environment, making purchase decisions more complicated (Almousa, 2011; Geistfeld, 1977).

For many consumers to comfortably engage in online purchasing, their trust toward the website may be critical. In online retailing, trust can involve cognitive, behavioral, psychological, cultural, uncertainty, and risk factors depending on the context of the engagement. An early model explaining trust in the online channel is the Model of Trust for Electronic Commerce (MoTEC) developed by Egger (2000). Based on MoTEC, there are three main factors (i.e., pre-purchase knowledge, interface properties, and information content) that may increase the number of online customers from just browsers (Halaweh & Kamoun, 2012). The constructs involved in MoTEC suggest a strong connection between the Human Computer Interaction (HCI) design and security perception, suggesting that the consumer's perception of security is closely related to their trust of the retailer (Halaweh & Kamoun, 2012). In addition, the degree of consumer involvement toward a website may also suggest perception of trust toward the vendor. That is, the perception of trust toward the vendor is influenced by website infrastructure attributes that take the place of information missing because of lack of experience (Williams & Kitchen, 2009). The accuracy of information influences trust in an online environment, which, in turn, may establish a strong connection to the perception of website security (Halaweh & Kamoun, 2012). Hence, trust and security are closely related features involved in evaluating websites that affects consumer behavior in the online channel.

While researchers further reported that online purchase intentions were influenced by the level of trust and the believability of the content on the website (Wang, 2003), consumers mostly evaluated the quality of the website based on their shopping mood (Demangeot & Broderick, 2006). Williams and Kitchen (2009) posited that when consumers lack knowledge about the transaction process, the reliability attribute of the website infrastructure plays a critical role in influencing their perception of trust. Wang (2003) further stated that the evaluation of a website is just one part of the consumer's overall purchase decision. In addition, Dholakia and Zhao (2010) examined consumers' evaluations related to online purchase decisions and found that consumers tend to base their purchase decision on two different interaction points: when the order is placed and after the order is fulfilled. They concluded that elements of fulfillment of an order had an impact on satisfaction and repurchase intentions.

Online versus Offline Shopping Experiences: Similarities and Differences

Selling merchandise in the online channel presents new challenges for retailers as it does not entirely mimic what is already known from brick-and-mortar retailing. Yet, research focusing on consumer behavior in the digital channel compared to brick and mortar is still needed. Luo, Chen, Ching, and Liu (2011) state that in online retailing, only the sight and hearing senses can be utilized whereas in the brick-and-mortar environment, all five senses can be manipulated to encourage purchase behavior.

Demangeot and Broderick (2006) describe the online shopping environment as "a much smaller theatre of experiences that requires some technological skill to be navigated

successfully" (p.326), which would involve fewer senses than in the physical brick-andmortar environment.

In order for a consumer to effectively evaluate a product as part of the purchase decision, it is necessary for them to engage with it. However, in the online environment, they are not able to physically engage with the product. Thus, it is necessary to create an environment that simulates what the consumer would experience as they engage with the physical product. The environment that is created might include a picture, text, virtual model, drawn image, sounds associated with the product or any combination of these elements. Providing a visual metaphor that the consumer understands can overcome the distance between the consumer and the physical product, giving the consumer additional information to evaluate the product's quality (Bitner, 1992). In the physical environment, the actual product provides information to the consumer that is useful in the purchase decision, while the information that a product gives in the online environment can be different because of the lack of physical engagement (Williams & Kitchen, 2009). Electronic Data Aids (EDAs), which provide a visual image or metaphor, are included in some websites and have been found to positively influence perceived quality judgments during the product evaluation by the consumer (Karaatli & Veryzer, 2012). When a consumer can easily find goods, clear product information is likely to result in a positive rating of the website (Dholakia & Zhao, 2010). Conceptually, this is reflected as informativeness, an important element that may signal information quality (DeLone & McLean, 2003). Bjork (2010) also reported that website quality not only includes utility features but also the presence of a latent emotion dimension. According to Parasuraman,

Zeithaml, and Malhotra (2005), website quality is defined as the extent to which a website facilitates efficient and effective shopping, purchasing, and delivery. Demangeot and Broderick (2006) posit further that the absence of "clicktile," examination of products hinders the ability of the consumer to evaluate the product, causing distance between the consumer and the product.

Since there is so much information available in the online environment, it is a challenge to locate the exact information that a consumer desires. Such challenges have led to the development of search tools used in online retailing to increase the precision of the results of a consumer search (Paik, Han, Oh, Ha, & Park, 2003), while Gangopadhyay (2001) suggests that product catalogs can provide alternative product choices and expert advice which can increase the efficiency of the online product search. If the consumer focuses just on the product-centered information search, they are likely to miss additional purchase options such as complementary products. This concept is vital for retailers to understand.

Online Consumers' Decision-Making Process

The evaluation process that a consumer engages in once information is received is different in the online channel as not all senses are engaged in the online channel as in the brick-and-mortar channel. Information received that a consumer can relate to a brick-and-mortar experience will increase positive recognition. According to seminal research, Stahl (1964) suggests that visible consistency is vital to increase recall. The search process that a consumer engages in typically results more information than they actually need to make a choice (Paik et al., 2003). Consequently, a number of technological tools

have been developed to facilitate consumers' search process (Geistfeld, 1977; Karaatli & Veryzer, 2012; Muylle & Basu, 2004). In addition, websites with navigational tools that focus on spatial learning (i.e., utilizing multiple memory systems) have shown to be effective as they mimic landmark-approaching behavior that is found in the physical environment (Sheynikhovich & Arleo, 2010). Furthermore, spatial learning is reflected in consistent website layouts that allow the consumer to navigate through the vast information that is available. Such technological tools also help to increase the ease of interaction, allowing the consumer to remain engaged and interested in an online store that can often focus on the task orientation (Manganari, Siomkos, Rigopoulou, & Vrechopoulos, 2011). In addition to landmarks that aid memory, websites also send signals to consumers that allow them to connect information from the website to aid in evaluating the product and company (Wang, 2003).

In addition to the technical advancements that are part of the decision-making process, recent research associates the emotions that a consumer experiences with steps in the decision-making process (Hofacker, 2008). Manganari et al. (2011) applied the Stimulus-Organism-Response (SOR) framework to study how a website's layout impacted consumers' decisions to interact with the website. They found that the assessment that consumers make of service providers and their websites is influenced by their attitude toward the website (Hopkins et al., 2009). While the brick-and-mortar channel allows for the emotions of consumer to be observed and engaged, the online channel does not allow for that observation of emotions to occur in the same way. Thus, online retailers must create an environment that mimics the emotions that are experienced

in the brick-and-mortar channel in order to engage the consumer in the same way. Cheng et al. (2009) have stated that creating an online atmosphere that is similar to the atmosphere in the brick-and-mortar store tends to have similar effects on the consumers' emotions. In addition, consumers' repurchase intentions in the online channel are influenced not only by the actual physical product purchased, but also by the experience of the online transaction, which includes variables such as the timing of receiving the product and the process of fulfilling the order. The latter can be the biggest challenge of the online purchase when compared to the brick-and-mortar channel (Dholakia & Zhao, 2010).

Furthermore, retailers communicate with customers by sending messages which influence their intentions and behaviors. In brick-and-mortar stores, the messages that are sent are researched as atmospheric signals, which can be further classified into two categories: social and ambient signals (Baker, Levy, & Grewal, 1992). While social signals are defined as the people component of the environment, including both store employees and customers, ambient signals are defined as the background conditions in the environment, such as lighting, music, and scent (Baker et al., 1992). In a study of tour operator websites, Bjork (2010) also further categorized atmospheric cues into four categories: information, pictures, interactivity, and impression. Online retailers must reexamine the messages and the ways of successfully using messages to communicate with customers considering that the physical elements that exist in brick-and-mortar stores do not exist in online stores.

Online Shopping Experiences and Generational Cohort

A number of researchers have argued that research has not completely caught up in understanding consumer buying behavior in the online channel (Chang et al., 2005; Doherty & Ellis-Chadwick, 2010; Hofacker, 2008). A number of studies reported that the channel where the shopping occurs impacts the buying behavior and the online shopping behavior also varies across generational cohorts (Bechwait & Siegal, 2005; Kumar, George, & Pancras, 2008; Liljander, Polsa, & Van Riel, 2009; Shulman, Coughlan, & Savaskan, 2011). Few consumer behavior models exist that apply known elements of brick-and-mortar shopping behavior with the special considerations of virtual reality to research and understand how the consumer engages in the online environment (Doherty & Ellis-Chadwick, 2010). For example, it is believed that millennial consumers (those born between 1985 and 1999) represent the largest segment of consumers online, purchasing the greatest amount of apparel online because they have grown up with technology in a way that other generational cohorts have not (Kim & Forsythe, 2010). However, several researchers have contended that cognitive age of the online consumer is not the same as the chronological age, suggesting that a person could chronologically be a baby boomer but cognitively act similar to someone who is a millennial (Allred, Smith, & Swinyard, 2006; Reisenwitz & Iyer, 2007; Swinyard & Smith, 2003). Nevertheless, among older consumers, security and transaction risk have been identified as important factors that may have caused the majority of older consumers to shy away from online shopping.

Luo et al. (2011) further stated that the more engaged a consumer is during their interaction with a website, the greater the browse intention will be. Williams and Kitchen (2009) also have reported that the involvement with the website is a predictor of future behavior. Specifically, a recent study reported that although Generation Y consumers (aged between 18 to 25 years old) and mature online consumers (50 years old and up) had similar attitudes towards the usefulness of online shopping, these two age cohorts tend to have significant differences in product search experiences (Leppel & McCloskey, 2011). That is, mature consumers are more frustrated with the online shopping process and more concerned about security than Generation Y consumers when shopping online. However, Reisenwitz, Iyer, Kuhlmeier, and Eastman (2007) further reported that when senior citizens became more familiar with the Internet, their higher degree of comfort decreased their risk aversion, which consequently affected their online purchase intentions. Additionally, the more experience a mature consumer has using the Internet, the less risk they are likely to perceive about purchasing apparel online (Kwon & Noh, 2010). Many studies (Chang, Chen, Hsu, & Kuo, 2012; Chang, Wang, & Yang, 2009; Hur, Ko, & Valacich, 2011; Jones & Kim, 2010; Kuan, Bock, & Vathanaophas, 2008; Tsao & Hsieh, 2012; Zhou, Lu, & Wang, 2009) about consumer behavior in the online channel focus on younger consumers; therefore, there is a gap in the literature of baby boomer behavior in the online channel.

Baby Boomer: The Potential Online Customer

Directly after World War II, the United States experienced a baby boom of elevated fertility rates that lasted 18 years until 1964 (Colby & Ortman, 2014). The baby

boomer generational cohort is currently the largest cohort in the U.S (Colby & Ortman, 2014). In 2011, there were just under 77 million baby boomers. However, it is predicted that in 2030, when boomers are between 66 and 84, there will be about 60 million baby boomers (Colby & Ortman, 2014). The size of the baby boomer cohort and the increase in material consumption have a positive significant impact on the US economy. Roberts and Manolis (2000) suggest that the unprecedented growth of trade in the U.S., when the baby boomers were growing up, impacted consumerism which will continue to influence future generations. During the baby boomers' formative years, they were raised to be independent and individualistic, many challenging authority which was different from the previous generation (Littrell, Ma, & Halepte, 2005). In addition, the advances in education, science and employment that occurred during their formative years led the generation to be characterized as self-focused (Moore & Carpenter, 2008). Boomers experienced economic prosperity throughout most of their adult lives (Kahle, 1995), leading to changes in consumerism as they were more focused on materialism that resulted in more spending compared to previous generations. Furthermore, advances in medicine and overall health have led to people living into their late 70s and/or early 80s with half of an adult life occurring after age 50 (Silvers, 1997). It is suggested that, based on boomer lifestyles, they will remain very active and productive past the time than previous generations after retirement (Coleman, Hladikova, & Savelyeva, 2006).

Boomers have discretionary income because of their place in the life cycle of having raised a family and realizing career plateaus. Because of the prosperity, cohort size and discretionary income of the boomers, companies are interested in providing

products and services directed at them (Littrell et al., 2005). Companies that connect and deliver products for the baby boomer cohort can be very successful based on the sheer size of the cohort. One example is Liz Claiborne, Inc. which designed, produced, and sold clothes to women who were entering the workforce in large numbers in the 1980's. At that time, these baby boomers were in their 20's with the focus on money and careers and entering professional working environments for the first time (Roberts & Manolis, 2000). The Claiborne clothing line was well known for its quality, comfortable fit, good construction, and color selection among working women. In 1986, Fortune 500 recognized Claiborne Company as one of the largest industrial companies in the United States, when sales reached \$1.2 billion (Fortune, 1986).

Consumption by boomers has changed and is now considered role-relaxed and retailers who can deliver value such as Nordstroms, Wal-Mart, Taco Bell, The Gap, and Target have realized increased success (Kahle, 1995). When boomers purchase clothing, they are most influenced by quality cues. When shopping, these boomers tend to focus on value of money and time, suggesting that retailers should utilize convenience and value strategies (Moore & Carpenter, 2008). In a study conducted by Discount Merchandiser in 1993, they found that boomers were very comfortable shopping by mail and telephone. Also, based on consumers' changing lifestyles it is reported that convenience and service are important aspects of shopping among the boomer cohort (Discount Merchandiser, 1993).

More interestingly, it is believed that the largest transfer of wealth in our country will be received by the boomers. Estimations are that boomers will inherit \$8.4 trillion.

Of which \$2.4 trillion has already been received and the remaining \$6.0 trillion is uncertain due to fluctuations in investments, with the median amount being approximately \$64,000 (Met Life, 2010). However, with the grey generation living longer, many boomers will not realize gains to their net worth until well into retirement. Many boomers are taking on care-giving responsibilities for aging parents or grandchildren, extending the time that they are in the family stage and decreasing the amount of time in the empty nest stage which has changed consumption patterns that need to be better understood (Silvers, 1997). While boomers may inherit from their parents the amounts will not ensure secure retirements, because many boomers did not save enough for retirement and are less than prepared in comparison to their parents (Met Life, 2010). Older boomers have a lower net worth (8%) than their parents at the same age due to job loss, impacts of the recession, and housing bust of 2008 (Hymowitz, 2014). Specifically, Boomers born at the beginning of the generation (1946 - 1955) have experienced a 28% loss in net worth from 2007 to 2010, while late baby boomers (1956 – 1965) have experienced a 25% loss in net worth from 2007 to 2010 (Moeller, 2013). Based on the changes in net worth, changes or elimination of company pension plans and lack of savings, many boomers still continue to work past the retirement age of 65 (Caudron, 1997). Based on lifestyle that baby boomers have become accustomed to which focuses on materialism, they need to continue working past the initial age of retirement to support themselves.

Rigby (2005) posits that companies that rely on assumptions about older customers and their lack of adopting new products will limit the success of a company.

Baby boomers have accepted technology and are not afraid to try new brands (Yang & Jolly, 2008). Since consumers are living longer and are more active, it is imperative to understand their needs and buying patterns, yet many companies miss interpret consumers over the age of 50 (Silvers, 1997). Coleman et al. (2006) suggest that, to maximize profits, it is necessary for companies to have an online presence that appeals to baby boomers. Many websites are built by younger people for the use of younger people and do not take into consideration the needs of the boomer customer (Stroud, 2005). The Pew Research center found that boomers do shop online, and shopping online is the sixth most common online activity for younger boomers and the fifth most common online activity for older boomers (Zickuhr, 2010). As consumers age, they face age-related challenges such as short-term memory, failing eyesight, and problems with precision movements that specifically affect their interaction in the online channel, indicating different design needs (Stroud, 2005).

Context of Study

The apparel category includes garments and is part of the greater category of fashion merchandise, which also includes shoes and accessories. Garments are worn for utilitarian reasons including protection, comfort, and function and are also worn for hedonic reasons including symbolism, communication, and reinforcement of the self (Thomas & Peters, 2009). Fashion is a high-profile and economically important industry as sales in the United States for apparel, footwear, and accessories category were USD 241.4 billion in 2012 (www.census.gov). Consumers' apparel consumption motivation is typically classified along a spectrum of fashion innovativeness and is regarded as being a

high-involvement category (Naderi, 2013). Social influence plays a role in consumers' apparel consumption in relation to their feelings toward apparel selections (Pentecost & Andrews, 2010). For example, teenagers feel that the apparel they wear indicates their inclusion in an accepted group of peers. On the other hand, a baby boomer might feel that comfort is the most important aspect of their apparel and thus disregard any current style trends. Female baby boomers preferred fit, product quality, and price over designer and brand names (Howarton & Lee, 2009).

Recently, many customers of all ages have bought apparel via online with online apparel sales doubling (e.g., 0.6% in 2007 to 1.2% in 2012) as a percentage of total online sale over five years (www.census.gov) That is, in 2012, online apparel sales were USD 2.8 billion, representing 1.2% of all apparel sales in the United States (www.census.gov). Online apparel shopping has advantages over traditional brick-andmortar and catalogs in that it offers convenience and time- saving aspects where a customer does not have to travel to a physical store and take as much time to search for an item (Watchravesringkan & Shim, 2003). Cho and Workman (2011) also reported that consumers who are fashion innovators and opinion leaders purchase apparel online because of the availability of products and ability to socially interact with others via the Internet. Goldsmith and Flynn (2005) concluded that consumers who purchase apparel online are more innovative and frequent Internet users. Those who purchased apparel online found online shopping to be fun, safe, and fast as compared to non-online buyers (Goldsmith & Goldsmith, 2002). Online apparel shopping behaviors have been found to be similar to that of apparel catalogs; however, today's consumers tend to purchase

apparel from multiple channels (Goldsmith & Flynn, 2005). Multichannel customers who purchase apparel in brick-and-mortar stores are likely to shop online for apparel, indicating the significance of apparel brands across channels (Seock & Norton, 2007). The technology involved with shopping online had been considered innovative as little as ten years ago; however, young consumers who have only grown up with technology do not consider it innovative (Udo, Bagchi, & Kris, 2010). Kim and Stoel (2004) posit that when evaluating apparel websites, a significant age difference among consumers (e.g., millennials versus baby boomers) can affect a difference in use of a website.

Statement of Problem

Although numerous studies have attempted to assess website quality by using different indicators such as technical features, e.g., interactivity, technology speeds and response times (Akinci, Atilgan-Inam, & Aksoy, 2010; Aladwani & Palvia, 2002; Bauer, Falk, & Hammerschmidt, 2006; Cebi, 2013; Doll & Torkzadeh, 1988; Hasan & Abuelrub, 2011; Hausman & Siekpe, 2009; Kim & Niehm, 2009), website design, e.g., aesthetics and color design (Bauer et al., 2006; Cebi, 2013; Cristobal, Flavian, & Guinaliu, 2007; Ganesch et al., 2010; Hasan & Abuelrub, 2011; Jeong, Oh, & Gregoire, 2003), security and privacy (Cristobal et al., 2007; Ganesh et al., 2010; Wolfinbarger & Gilly, 2003; Yoo & Donthu, 2001), and service quality, e.g., empathy, responsiveness, and customer service (Akinci et al., 2010; Bauer et al., 2006; Cristobal et al., 2007; Ganesh et al., 2010), there is a lack of research that consistently identifies the dimensions of website quality.

In addition while several studies have examined the influences of dimensionality of website quality on other emotional and behavioral responses (Bai, Law, & Wen, 2008; Kim, Ferrin, & Rao, 2008; Liu & Arnett, 2000; Sousa & Voss, 2012), there is not a clearly established link between certain dimensionalities of website quality (e.g., system quality, service quality, information quality) and overall perceived website quality. Furthermore, relationships among overall perceived website quality, satisfaction, and trust are not well established in the literature. Such relationships are important because they may aid in better understanding online consumers' decision-making processes. In addition, there is a need to understand the role of trust in online decision making because a number of researchers have reported that trust could enhance the degree of loyalty consumers establish towards the website (Flavian, Guinaliu, & Gurrea, 2006; Harris & Goode, 2004; van Iwaarden, van der Wiele, Ball, & Millen, 2004)

A number of previous studies have also conceptualized and measured loyalty using behavioral aspects, focusing on frequency and amount of purchase. Researchers have suggested that a distinction needs to be addressed between attitudinal loyalty and repeat purchasing behavior (East, Gendall, Hammond, & Lomax, 2005; Jacoby & Kyner, 1973). Attitudinal loyalty deals with a relationship that a customer develops toward the retailer, while repeat purchase behavior does not entail psychological commitment. Instead, this specific behavior occurs due to time and/or energy costs saving, risk reducing, and/or the absence of products. However, there are few studies on e-loyalty that assess attitudinal loyalty and repeat purchasing behavior such as word-of-mouth (WOM), share of wallet, and repatronage behavior (Garland, 2004; Perkins-Munn, Aksoy,

Keiningham, & Estrin, 2005). Actual purchase and revisit intentions have been included in a number of studies as results of the influence of perceived website quality (Bai et al., 2008; Corbitt, Thanasankit, & Yi, 2003; Hausman & Siekpe, 2009; Jeong et al., 2003). The direct relationship between customer satisfaction and customer loyalty was also evident in the literature (Cristobal et al., 2007; Udo et al., 2010). That is, a satisfied customer was more likely to have positive WOM and to purchase from the retailer again (Chang, Wang, & Yang, 2009). However, such relationships among website quality, satisfaction, and dimensionality of loyalty on an online environment are sparse, indicating a need to further understand whether such relationships exist in an online shopping environment. In addition, a number of researchers have suggested that consumer satisfaction and loyalty have become the keys to success for today's online retailers (Sriniyasan, Anderson, & Ponnavolu, 2002).

Furthermore, the link between satisfaction, trust, and loyalty has not been adequately established in the online shopping literature. The DeLone and McLean Model developed in 1992 examined the interrelationship among the three constructs in relation to website quality. However, the researchers did not examine the direction or strength of such relationships (DeLone & McLean, 2003). Many have suggested that trust plays an important role in relational exchange because "all marketing activities are directed towards establishing, developing, and maintaining successful relational exchanges" (Morgan & Hunt, 1994, p. 22). According to Sheth and Parvatiyar (1995), consumers tend to engage in relational marketing behaviors because they want to minimize risk and simplify their buying tasks by reducing the number of products under consideration. As

such, continued success for many online retailers may require better understanding of the role of trust in influencing consumers' loyalty.

The growth in baby boomers is one of the most significant changes affecting retail business. Many firms are becoming more and more interested in trying to understand the over-fifty segment as potential customers because of their high discretionary income and propensity to consume (Reisenwitz & Iyer, 2007). According to Solomon (2009), the baby boomer age cohort refers to those who were born between 1946 and 1964, comprising 32 percent of the US population (www.census.gov). Baby boomers' shopping experiences have been molded by the development of suburbia, new highways, large shopping centers, media influence through television, and the introduction of the modern credit card (IBM, 2012). Research focusing on baby boomers' shopping behaviors in the virtual environment is lacking. Previous online research has been mostly comprised of younger consumers because they are less fearful of online security, are heavy computer users, and have high computer literacy (Allred et al., 2006). However, baby boomers constitute a large generational cohort that does not utilize online retailing to its fullest potential. In order to capture this market segment, it is necessary to understand their behavior in the virtual environment because the growing population of older consumers may have raised numerous potential opportunities for online retailers (Weisberg, Te'eni, & Arman, 2011).

According to American Association of Retired Persons (AARP), a nonprofit organization that provides information and services to people who are 50 and over, its current membership is more than 37 million people. A recent report by AARP in 2012

revealed that 80% of members own at least one technology device (e.g., desktop computer, laptop, e-reader and iPad/tablet); approximately 90% of members have a mobile device while 31% of members have a smart phone (AARP Research & Strategic Analysis, 2012). Vuori and Holmlund-Rytkonen (2005) compared American and Finnish baby boomers and found that American baby boomers were more likely to purchase merchandise online as compared to Finnish counterparts. Since many baby boomers own either a technology device (e.g., computer) or a mobile device, it is important to examine their online shopping behavior.

Purpose of the Study

The baby boomer generational cohort represents a market of substantial opportunity for retailers, yet their online shopping behavior is not well understood. Most studies relating to online retail focus on younger users because they are first to adopt technology. Although college-aged participants are commonly used as research participants in many online studies (Chang et al., 2012; Chang et al., 2009; Hur et al., 2011; Jones & Kim, 2010; Kuan et al., 2008; Tsao & Hsieh, 2012; Zhou et al., 2009), few studies examined mature consumers' online shopping behaviors (Sousa & Voss, 2012).

The purpose of the study is to propose and empirically examine an integrative model of consumer loyalty within an apparel online shopping context with baby boomer online users. Prior to testing the following objectives, this study first seeks to explore the applicability of the construct of website quality with baby boomers. Assuming the

construct of website quality is valid, the specific research objectives guiding the study are:

- To examine the associations between website quality and overall perceived website quality;
- 2. To examine the associations among overall perceived website quality, consumer satisfaction, and trust; and
- 3. To examine the associations among consumer satisfaction, trust, and consumer loyalty.

Significance of the Study

To date, the extant online consumer behavior literature lacks empirical research on the relative impact of dimensions of website quality on overall perceived website quality and its relationships to satisfaction, trust, and loyalty with respect to the baby boomers. The Technology Acceptance Model (TAM) (Davis, 1989) addresses partly the impact of the technology associated with computers; however, TAM does not address the potential influences of website quality on shopping behavior. The information about products and their features is presented differently in the online context because of limitations that the customers are not physically engaging with the product. There is a lack of understanding related to the presentation of information (e.g., transaction security, web appearance) on a website and the physical distance between consumers and products that may impact consumers' evaluations of website quality, which consequently affect their purchase intentions in the online channel.

In addition, shopping behavior in online retailing has been studied utilizing keystroke information from actual transactions; however, this research stream only analyzes actual transactions and not the relationship between purchase intentions and actual purchases (De, Hu, & Rahman, 2013). Many studies of online retailing only involve younger users of technology, typically those thirty and younger because they represent the largest and most active technology users (Chang et al., 2012; Chang et al., 2009; Hsieh & Tsao, 2014; Hur et al., 2011; Jones & Kim, 2010; Kuan et al., 2008; Tsao & Hsieh, 2012; Zhou et al., 2009). Hence, it is imperative to study the behavior of consumers who engage with online retailing in order to make necessary strategies to capture sales. Results of the current study will contribute to existing online shopping behavior literature on baby boomer consumers.

Since few online shopping studies are specific to the baby boomer, it is unclear about their evaluation of the dimensions of perceived website quality and whether interrelationships among perceived website quality, satisfaction, trust and loyalty exist. Therefore, a greater understanding of such relationships will allow retailers to make strategic adjustments to websites in order to better serve the baby boomer cohort. Furthermore, increased understanding of online consumer behavior will allow retailers to offer merchandise that result in greater sales. In order to appeal to the over-fifty segment, online marketers need to understand the perceptions of websites and how such perceptions ultimately influence their decisions to shop online. As Tong (2010) suggests, "Online retailers should seek ways to minimize the risks that consumers feel when making Internet purchases" (p. 753). The study's findings will allow management to

proactively create strategies and design online stores that cater to the large mature consumer demographic so that firms can capitalize on their projected hundreds of billions of dollars in sales. Product assortments and advertising messages can also be customized to reach this untapped market in the virtual environment. It is indicated that two-thirds of baby boomer households will receive an inheritance totaling an estimated USD 6 trillion (MetLife, 2010), suggesting that this generational cohort has the financial ability to purchase additional merchandise via this electronic medium. As such, the opportunity to reach baby boomers through online retailing offers an untapped resource for retailers.

Definition of Key Terms

The following table provides definitions for key terms that are applied throughout this dissertation.

Table 1. Definition of Key Terms

Key Term	Definition
Baby Boomer	The age cohort of those who were born between 1946 and 1964, making them between forty-six and sixty-four years old at the time of the 2010 U.S. Census (Solomon, 2009).
Customer satisfaction	Customers' evaluations of a product or service with regard to their needs and expectations (Oliver, 1980).
E-commerce	Transactions sold online whether over open networks such as the Internet or proprietary networks running systems such as Electronic Data Interchange (EDI) (www.census.gov).
eWOM	Exchanging information about a product or service experience in the online channel through website

bulletin boards, email, chat rooms, blogs, forums and other computer mediated communication tools (Tsao & Hsieh, 2012).

Electronic Commerce Architecture (ECA)

A framework that has been developed to provide a foundation for online retailing. It is organized using flexible business processes and includes three layers of services: network services which support the Internet, commerce services which include transactional services, and content services which are industry specific applications (Basu & Muylle, 1999).

Electronic Data Interchange (EDI)

A technology that is used by retailers and vendors to share extensive merchandise planning information which reduces the amount of paperwork previously required to process purchase orders (Diamond & Litt, 2009).

End User Computing (EUC)

The user interacts directly with the software application in entering and retrieving information as the decision maker (Doll & Torkzadeh, 1988).

End user computing satisfaction

The effective attitude towards a specific computer application by someone who interacts with the application directly (Doll & Torkzadeh, 1988).

Interactive Home Shopping (HIS)

A distribution channel where home refers to interaction that a customer engages in outside of a traditional store (Alba, Lynch, Weitz, Janiszewski, Lutz, Sawyer, & Wood, 1997).

Risk

The possibility of suffering harm or loss; danger. Risk has been conceptualized as the product of two dimensions: the perceived (adverse) consequences of behavior, and the likelihood, or impact, of their occurrence (Cox, 1967; Dowling, 1986).

Trust

When a consumer is comfortable sharing personal information, making purchases, and acting on web vendor advice (McKnight, Choudhury, & Kacmar, 2002).

Website	A stimuli-based decision-making environment which includes texts, images, audio, animations or video (Tam & Ho, 2005).
Website Quality	Users' evaluation of a website's features that meets their needs and reflects overall excellence of the website (Aladwani & Palvia, 2002)

Organization of Chapters

Chapter I provides a general introduction to the overall dissertation, including the background of relevant research topics, statement of problem, the purpose of the study, the significance of the study, and definitions of key terms. Chapter II provides a review of the literature pertinent to the current field of inquiry. Literatures were synthesized from the areas of the definition and development of the channel of online retailing, online store atmosphere and website quality, consumer trust in the online environment, and consumer satisfaction and consumer loyalty in the online environment. Chapter II also offers the conceptual framework and a set of testable hypotheses. In addition, Chapter III presents the methodology utilized in the study, including instrument development, sample selection, data collection procedures, and expected statistical analysis that will be used to test each of the hypothesized relationships.

Chapter IV presents the results of the statistical analysis that were employed to answer all proposed hypotheses, including an overview of sample characteristics, descriptive statistics of all variables, confirmatory factor analysis, and the results of measurement or statistical models. Chapter V presents the discussion and conclusion of

the study including a discussion of each proposed hypothesized relationship, implications and limitations for future research directions.

CHAPTER II

LITERATURE REVIEW

This chapter provides relevant literature related to online retailing research. The main areas discussed include channel development and online retailing, website quality, consumer trust in the online environment, and consumer satisfaction and consumer loyalty in the online environment. The proposed conceptual framework is presented, followed by a set of testable hypothesis and summary.

Channel Development and Online Retailing

In the early days of the Internet, the understanding of how the Internet worked was vague and the potential uses were not truly conceptualized by most companies.

Hoffman and Novak (1996) established the basic premise of how the Internet and World Wide Web worked with regard to communication models, whereas traditional marketing communication was based on one-to-many which is referred to as mass media.

Communication on the web is a many-to-many model with the idea that all involved in the message both receive and sends messages (Hoffman & Novak, 1996). Understanding the flow of communication in the new medium would allow retailers and marketers to better utilize their resources and eventually be more successful in their initiatives. The introduction of online services initially restricted access, therefore limiting the entrance to the online forum as well as limiting contact with large numbers of people. However, the World Wide Web allowed for open-access of Internet capabilities and lower entry

barriers, which allowed more companies to engage with large numbers of people. In the early days, electronic commerce included both web and proprietary online services which included EDI (electronic data interchange), kiosks, electronic classified advertisements, and among others (Hoffman & Novak, 1996). It was suggested that, with the increasing use of the web, marketing products and services could be more effective in the online environment than in the traditional media. Since marketing research of the online channel is very sparse before 1996, the implications were limited. It was also suggested that it was necessary to draw conclusions regarding the new channel from relevant literature in psychology, communications, media studies, organizational behavior, and humancomputer interaction (Hoffman & Novak, 1996). The conclusions were used to develop a model of communication as it applies to the online channel. The Internet has allowed rapid growth of companies without consideration to location, increasing competition among firms that would otherwise not be considered competition because of physical proximity resulting in higher quality services, lower prices, and increased profit margins (Hasan & Abuelrub, 2011). The online distribution channel offers additional flexibility to consumers, greater market potential, reduced costs, greater product offerings, and convenience, and these are all considered advantages over brick and mortar stores (Srinivasan, Anderson, & Ponnavolu, 2002).

The first generation of online retailing witnessed companies that were technologically advanced develop ways to reach customers through the use of websites.

There was great concern throughout the retailing and business community that additional shopping channel (i.e., online channel) would hurt existing business as it was assumed

that customers would choose only one channel to do business with (Doherty & Ellis-Chadwick, 2010). However, there was also great opportunity to increase efficiency in inventories due to the business model that was employed in the online channel. Alba et al. (1997) presented a connection of online retailing to a "new and revolutionary distribution channel known as interactive home shopping (IHS)" (p.38), where home shopping refers to interaction that a customer engages in outside of a traditional store. IHS conceptualized interactivity as a continuous construct between two parties (Hoffman & Novak, 1996) and includes all Internet and other non-store retailing, which has continued to grow since its inception.

Initially, the online channel only offered product information in order for the customer to use the information to make a purchase decision either online or in-store. As such, this need for useful and organized information led to the development and refinement of search engines. The IHS format suggested that search engines were either owned and/or controlled by the retailer, a third party, or a software package that was available to customers (Alba et al., 1997). However, it was found that search engines that were developed by retailers limited the customer interaction to the controls, such as product and price comparison as set by the retailers.

According to Alba et al. (1997) first generation online retailers viewed IHS as a threat because of increased price competition; therefore, their investment in IHS was limited and viewed as a defensive strategy. These limited views were supported by the lack of consumer behavior information in the online channel. Retailers tended to assume that customers would engage in online purchase behavior similar to that of in-store

behavior; therefore, new strategies were not necessary. As a result, predictions about the buying behavior of the consumer were made before the technology was widely accepted and therefore any findings found were not generalizable at this point. As the understanding of the structure of the channel increased, research could be conducted to understand the specific behaviors that customers exhibit in the online channel. Search engine and website development were necessary for the further advancement of the channel.

Hasan and Abuelrub (2011), further classified business that occurs in the online channel into four major categories: business to business (B2B), business to consumer (B2C), consumer to business (C2B), and consumer to consumer (C2C). The various formats of business that occurs in the online channel leads to inconsistent policy and procedures. Online retailing applications are considered end-user computing (EUC) as defined by the user interacting directly with the software application in entering and retrieving information as the decision maker. The application of EUC has experienced significant growth in the last twenty years (Doll & Torkzadeh, 1988).

Furthermore, there are two main research streams in online retailing; one focuses on the technical linear aspect of the technology involved in internet commerce and the other one deals with the marketing perspective which includes the consumer behavior aspect of internet commerce. Early studies of the online channel were focused on the Information Systems (IS) approach, which examined the online channel only from a technical perspective until the dot.com bubble occurred (Chiou, Lin, & Perng, 2010). The dot.com bubble of the 1990's is described as when the equity value of stocks, mainly

technology related stocks grew at a faster than normal rate, even tripling at the peak until the market adjusted causing the equity value to decrease by up to thirty percent (Kraay & Ventura, 2007; Ljungvist & Wilhelm, 2003). It is suggested that, in response to changes in the technology industry, it was necessary to adjust the perspective of the online channel to focus more on marketing and consumer behavior than just the information system (Dohlakia & Zhao, 2010). Before the dot.com bubble, the majority of studies were focused on IS with less than one-third employing a combined marketing and IS approach. However, after the burst, more than half of the studies were a combined IS and marketing focus (Chiou et al., 2010). A number of researchers have suggested that in studying how a consumer evaluates a website, it is necessary to research both information systems and marketing (Bai et al., 2008; Loiacono, Watson, & Goodhue, 2007). In order to produce an effective website, Hausman and Siekpe (2009) posited that it is necessary to evaluate both the technical and human elements from the perspective of the user.

The marketing perspective of website evaluation has been studied from various positions, including web-marketing mix (WMM), operational, organizational and technical aspects (Chiou et al., 2010), promotion, provision and processing (Ho, 1997), and product, promotion, price, place, and customer relationship (4PsC) (Dutta & Biren, 2001). Loiacono et al. (2007) posited that approaching the online distribution channel from the combined perspective of IS and marketing is essential in evaluating website quality as technology continues to change and new forms of applications for access to the online distribution channel are developed. According to Hausman and Siekpe (2009), technology and human factors are major determinants of online shopping, while

increased technology has a positive effect on shopping experience and human factors have an impact on consumer behavior in the online channel.

Ganesh et al. (2010) stated that business that is conducted in the online environment is an example of the theory of disruptive innovation where the technological advancement allows technology to be leveraged in a way that alters traditional business models. Of the barriers to the online channel, it was clear that the retailer faced many of their own, such as taking business from their offline stores, utilizing technological knowledge to engage in online retailing, and engaging with their online customers (Doherty & Ellis-Chadwick, 2010). However, the barriers that the customer faced were just as many. These barriers included technology, information overload, trust, and security (Allred et al., 2006). Li et al. (1999) further revealed that online stores have limitations compared to conventional stores with regard to presentation of product information. As a result, customers may make fewer impulse purchases because they are missing the marketing messages by going directly to the product. In addition, online shopping does not allow for the customer to interact with the product and the store atmosphere. Li et al. (1999) suggested that channel knowledge is the strongest predictor of online shopping behavior.

Furthermore, in the early days of online retailing, retailers assumed that the information about customer profile would be consistent with the in-store customer profile because it was believed that customers would choose one channel over the other and not engage in multi-channel activity (Doherty & Ellis-Chadwick, 2010). One of the underlying benefits of IHS is that the customer data that is captured during the

interactions can be used to understand their behavior. Thus, the use of the data offers great insight into the demographics and psychographic information of the customer and their purchase habits. As Alba et al. (1997) stated, "...the advent of IHS raises significant questions pertaining to consumer behavior and industry structure" (p. 50).

Li et al. (1999) proposed an online shopping behavior model, suggesting that consumer online buying behavior is affected by demographics, channel knowledge, perceived channel utilities, and shopping orientations. Using a descriptive approach, Swinyard and Smith (2003) also provided a lifestyle perspective of the Internet shopper who is comfortable using the internet. That is, these Internet shoppers tend to be very computer savvy, are younger, are better educated, and wealthier than those who do not shop online. Alba et al. (1997) examined online consumers' experiences and suggested that "attributes that are search attributes in one format might be experience attributes in another" (p. 43). This is the foundational concept in assessing the shopping motivation that a customer tends to utilize in the online channel. While consumers understand how to engage with merchandise and search in the brick and mortar environment, the online environment presents a new way for the consumer to engage not only with the merchandise as well as with the retailer (Almousa, 2011). Kim and Stoel (2004) have suggested that investigating online shoppers who had previous experience with purchasing from a website allowed for a more thorough understanding of their perceptions about website attributes such as web appearance, entertainment, informational fit-to-task, transaction capability, response time, and trust.

In addition, Swinyard and Smith (2003) established factors associated with satisfiers and dissatisfiers of e-retail shopping. In their study, while online shoppers were defined as heads of households having an at-home internet connection that make online retail purchases, online non-shoppers were defined as individuals that have not made such purchase. The key factors that separate satisfiers from dissatisfiers online shoppers include convenience, entertainment, ease of use, security, price, and quality of merchandise. Results showed that neither online shoppers nor online non-shoppers constitute a homogeneous market segment of just online or non-online shoppers, indicating that shoppers make purchase in both online and offline channels (Swinyard & Smith 2003). This information is considered seminal for the further development of lifestyle research of the online customer. In addition, Ganesh et al. (2010) identified seven online shopper segments that explain their shopping motivation, including interactive shoppers, destination shoppers, apathetic shoppers, e-window shoppers, basic shoppers, bargain seeker shoppers, and shopping enthusiast shoppers. Interactive shoppers are described as having a high degree of individualism, prefer personalized services, and engage in online bidding. Destination shoppers are described as motivated to keep up with trends and are concerned with creating an image. Apathetic shoppers are described as not having strong motivation for any particular shopping dimension. Ewindow shoppers are described as being driven by stimulation, very curious, and are motivated to visit interesting websites. Basic shoppers are described as task oriented for convenience and do not seek variety of merchandise. Bargain seeker shoppers are

described as being price oriented and hunting for the best bargains. Shopping enthusiast shoppers are described as being motivated to shop for the enjoyment of shopping.

Early online consumer research indicated that online shoppers were very different from the offline consumer. However, Ganesh et al. (2010) found that five of the seven shopper groups are similar in terms of the behavior of consumers who shop online versus offline, such as shopping motivation and store attributes as classified in five shopper groups: apathetic, basic, bargain seekers, destination, and shopping enthusiast. The differences that exist are in direct relation to the difference in the channel delivery. Most studies of online consumer behavior only include participants who purchase in the online channel, yet it is important to understand the behaviors of those consumers who are browsing and do not engage in purchasing (Bai et al., 2008). Researchers (e.g., Forsythe & Shi, 2003; Kim & Stoel, 2004; Kwon & Noh, 2010) have criticized many online retailing studies related to the use of young consumers because this segment may not represent the general population. However, Hausman and Siekpe (2009) found that most online shoppers aged between 18 to 45 years. To support this notion, a study of apparel websites focused on an older female consumer who reported an average age of 36 years old (Kim & Stoel, 2004). Bai et al. (2008) also reported that respondents of the study were relatively young with 93% of them reporting that they were younger than 46 years old. Nevertheless, McKnight et al. (2002) contended that student samples are similar to the online population because they are younger and more educated. In addition, in Bauer et al. (2006) study, they reported demographic characteristics of their participants that

tended to be well educated; this group is likely to be early technology adopters and having prior experience in using online shopping (Bauer et al., 2006).

Furthermore, Ladhari (2010) found that the quality of online service has a significant effect on consumer attitudes and behaviors, toward the website. Companies have invested heavily in the online distribution channel, yet an effective measurement tool evaluating the quality of the website is still needed (Aladwani & Palvia, 2002). Recently, Hasan and Abuelrub (2011) developed a framework that could be used to compare the quality of websites, identify improvements for website quality, and establish guidelines for future development of websites.

Assessing Website Quality

Companies that have invested in website development are interested in utilizing an instrument to measure and analyze how consumers perceive their website (Loiacono et al., 2007). Website quality is defined as the perception of how a user evaluates a website for its features meeting their needs (Aladwani & Palvia, 2002). Hasan and Abuelrub (2011) suggested that website quality includes technical opinions of the features of the site. Ladhari (2010) conducted an extant review of literature on e-service quality scales (e-SQ) and reported that the majority of the studies focused on functional quality (service-delivery process), not technical quality (outcome of the service process). Similarly, Sorum, Andersen, and Vatrapu (2012) argued that website quality is limited to mostly system functionality and information quality, whereas service quality is only assessed to a small degree if time allows. While some previous studies measured website

quality by focusing on the usability attribute (Teo, Oh, Liu, & Wei, 2003); however, others (Kuan et al., 2008) investigated website quality from an outcomes perspective.

Furthermore, Chiou et al. (2010) examined the dimensionality of website quality from the IS perspective which include usability, accessibility, navigability or information quality, while research from the marketing perspective included dimensions such as advertising, promotion, online transaction, order confirmation, or customer service as a means to assess the quality of the website. Wells, Valacich, and Hess (2011) further stated that perceptions of website quality is impacted by the perceived quality of each dimension. Therefore, favorable perceptions of dimension quality increase the overall perceived quality of the website and vice versa (poor website quality negatively reflects the internet as a distribution channel) (Hasan & Abuelrub, 2011). Bai et al. (2008) posited that hospitality and tourism companies that conduct business in the online channel must invest in designing an effective website in order to deliver a positive customer experience that results in sales.

Researchers have suggested that it is vital to the success of an e-commerce company to assess the quality of their website in order to improve and understand the competition and industry benchmarks in an effort to improve their position in the online channel. Some companies have developed their own method of evaluating customer satisfaction and website quality. One example is Bizrate.com where customers score the retailer on a number of aspects of the shopping process such as ordering, product selection, information, price, delivery, support, privacy, and shipping and handling (Wolfinbarger & Gilly, 2003). Sorum et al. (2012) posited, however, that a gap exists

between delivering high quality websites and feedback that indicates need for improvement.

As technology changes speed of access to the internet, there are elements of website design that enhance or hinder perceptions of usability affecting the consumers' perceptions of importance (Wolfinbarger & Gilly, 2003). According to Cebi (2013), design parameters for websites include usability, technical adequacy, and security and these design parameters are equally important influencing consumers' perceptions of websites. However, it is suggested that their importance was greater than visual and content aspects of the website. Furthermore, aesthetic appeal of the website was also found to strongly relate to consumers perceptions of functionality and usability (Bauer et al., 2006). Specifically, Bai et al. (2008) identified functionality as the contents or information richness of a website, where usability is related to design and the degree of ease for the user to use the website. A study conducted by Wells et al. (2011) concluded that visual appeal is the dimension that has the strongest effect on website quality.

Kuan et al. (2008) suggested that when customers have the opportunity to customize their website experience, their evaluation of service quality tend to be more positive. Consequently, in a new purchase situation, a positive experience with a website will decrease the negative impact on trust (Pizzuti & Fernades, 2010). Chang et al. (2012) employed the loss aversion concept to assess website quality and determined that if a lower than expected website quality occurs, then the internet user will perceive a lower use of ease and usefulness of the website, resulting in decreasing their behavioral intentions to purchase the product from the website. Furthermore, using content analysis,

Chiou et al. (2010) found that the product category has an impact on the prediction of the quality of the website. Wolfinbarger and Gilly (2003) also reported that a category such as books, CDs, and videos has a stronger impact on website quality than the other categories they studied as it was the most reported category of online purchase activity. Website quality evaluations are impacted by the quality of the service regardless of industry (Ladhari, 2010). Ladhari (2010) further suggested that the instrument employed to measure quality should factor in the type of user and the service setting. Kim and Lennon (2010) found that websites evaluated with high information were perceived as providing greater satisfaction in online apparel websites. Cristobal et al. (2007) added that websites that are user-friendly result in greater satisfaction and loyalty. Hernandez, Jimenez, and Martin (2009) also reported that the most significant impact on loyalty is the post purchase service that occurs after the initial purchase.

Demangeot and Broderick (2006) suggested that there are four dimensions of websites, i.e., context familiarity, product presence, visual impact, and site-user understanding that aid in determining its quality. In order for the website to be effective, messages need to be managed to create a shopping atmosphere that the consumer can engage and connect with. When atmospherics are effectively utilized in website design, not only does it allow the consumer to distinguish the retailer from its competition, but consumers tend to spend more time browsing the website and have greater purchase intentions as well (Luo et al., 2011). In addition, color is found to be a major attribute in website quality and usability whereas the balance between colors and size of clear visual images improves the perception of product quality, vendor competence, and trust

(Papadopoulou & Pelet, 2011). Bauer et al. (2006) contended that consumers in the different stages of the decision process, e.g., search and information gathering stage, agreement stage, fulfillment phase, and after the purchase phase tend to have different means to assess the quality of the website.

Due to the significant growth in the number of websites, there is a need for instruments that can measure website quality (Hasan & Abuelrub, 2011). Aladwani and Palvia (2002) found that consumers evaluate the quality of the website based on three dimensions: technical adequacy, web content, and web appearance. Furthermore, Chiou et al. (2010) reported that the most common dimensions of website evaluation in current research include website usability and design, content, quality, user acceptance, and user satisfaction. A number of researchers have also suggested ways to improve website design through evaluation, establishing guidelines for improvement (Forsythe & Shi, 2003; Goldsmith, 2002; Yen, Hu, & Wang, 2007). It was found that studies that evaluated websites from the IS perspective, consumer satisfaction was driven by information and system quality. However, it was found that online studies that were driven from the marketing perspective, consumer satisfaction was influenced by the etailing experience (Chiou et al., 2010).

Aladwani and Palvia (2002) suggested that consumers evaluate the quality of a website based on four dimensions, i.e., specific content, content quality, appearance, and technical adequacy. In the online distribution channel, quality can be realized during different aspects of the transaction; therefore, Wolfinbarger and Gilly (2003) evaluated a consumer's judgment of quality of a website during the entire purchase process. They

reported that initial judgments had a greater impact on quality during the purchase process.

Furthermore, Bauer et al. (2006) contended that it is necessary to research ecommerce utilizing a transactional framework when evaluating service of both utilitarian and hedonic purchases. It is suggested that framework of website quality needs to include the transaction process and employs a hybrid perspective that considers both IS and marketing perspectives that are of importance to each stage of the decision making process (Chiou et al., 2010). Wolfinbarger and Gilly (2003) further contended that measurement of website quality lacked adequately defined constructs, instead researchers identified attributes (e.g., advertising/persuasion, playfulness, entertainment) that related to measuring outcomes of satisfaction. Chiou et al. (2010) further added that when the marketing perspective was employed in studies, the focus was on fulfillment factors. However, when the combined approach studies identified the factors of ease of use of website, information quality and responsiveness of company, yet the impact of the relationship between web strategy and evaluation factors was not addressed.

The extant literature reveals three major dimensions that are commonly used to evaluate website quality and these are system quality, information quality, and service quality (Chen, Rungruengsamrit, Rajkumar, & Yen, 2013; DeLone & McLean, 2003; Shih, 2004; Wang, 2008). Each is comprised of multiple constructs, service quality includes fulfillment and responsiveness, system quality includes web appearance and interactivity, and information quality includes informativeness and security.

System Quality

According to DeLone and McLean (2003), system quality is described as "the desired characteristics of an e-commerce system" (p.24). Palmer (2002) defined system quality as the degree that the user believes the website is easy to navigate. System quality includes factors such as the availability of the website, the ability to move throughout the website, and download speeds (Akinci et al., 2010). In addition to the functionality of the website, the style and appearance of the website are included in system quality (Chang et al., 2005; Corbitt et al., 2003). Cyr (2013) identified four design categories that are of importance when developing effective website (i.e., information design, information content, navigation design, and visual design) and navigation and visual design are important parts of system quality. According to Demangeot and Broderick (2006), visual aspects are design related elements of the website and site-user understanding as the degree to which the website responds to the user in navigating the website. It is suggested that as consumers become more familiar and comfortable with navigating in the online environment, they are likely to view little difference between virtual layouts of different stores (Manganari et al., 2011). Based on the extant literature, thus, in the current study, system quality consists of two dimensions, web appearance and interactivity.

Web Appearance

Web appearance is defined as the attractiveness of the website that reflects the design features such as color, font, graphics, style, and language (Aladwani & Palvia, 2002). Website design can be evaluated utilizing factors that are found in the application layer, generic web design layer, and graph modeling layer that are used to classify

common design scenarios (Yen et al., 2007). In evaluating website quality of online apparel retailers, Kim and Niehm (2009) found that different types of consumers and their apparel shopping behaviors indicate the need for flexibility in website design based on the consumers' needs. Different industries have similar key features for website design and there is a need for more development of those classifications (Yen et al., 2007). Researchers have suggested that in the online channel, the design elements used in websites significantly and consistently impact the consumer shopping experience (Baker, Parasuraman, Grewal, & Voss, 2002). Demangeot and Broderick (2006) also reported that the visual element of design in the brick and mortar store provides a reference for atmospherics in the online channel. Therefore, it is important for online retailers to focus on the visual elements of the website design. Cai and Xu (2011) further suggested that website aesthetics consists of two important dimensions that are highly valued by the consumer, i.e., classical aesthetics and expressive aesthetics. Lavie and Tractinsky (2004) defined classical aesthetics as the orderliness and clarity of design, while expressive aesthetics is the originality, creativity, and richness of design. Expressive aesthetics are more significant when a hedonic product is sought because this type of product is associated with enjoyment and shopping process (Cai & Xu, 2011).

Creating the positive experience for the consumer to engage in online activities requires an atmosphere that is manipulated through various ambient factors, including having desirable aesthetic design because ambient factors have been found to have a positive impact on consumers' attitudes and behaviors (Hopkins et al., 2009). For example, when utilizing music and color in website design, researchers have found that

the faster the music and the warmer the color, the higher the arousal. These results suggest that one atmospheric factor alone does not impact the shopping experience; however, a combination of factors does (Cheng et al., 2009). Similarly, Bjork (2010) posited that pictures and information are the most important atmospheric factors in website design.

Many studies involving atmospherics of websites have focused on the connection of the atmospherics and variables associated with utility outcomes such as purchase activity. However, Bjork (2010) determined that emotional responses are also connected to atmospherics. It is recommended that features used in the development of online stores (e.g., ambient factors, layouts, visual, and textual elements) should be consistent with those found in the brick and mortar shopping environment because such features reflect a company's image (Hopkins et al., 2009). In addition, while some visual and sensory messages are similar to the messages that visual merchandising elicits in the physical store environment, not all senses can me engaged in the online environment (Bjork, 2010). While sight is the most used sense in the online environment, displays are employed to enhance the products just as in the brick and mortar environment.

Visual merchandising display factors are also utilized in the online environment but, because of the technology, some display factors do not have a comparable factor in the physical environment (Ha, Kwon, & Lennon, 2007). Visual merchandising and display in a brick-and-mortar store utilizes not only the display window but the entire store as part of the overall display. Nevertheless, this concept is difficult to achieve in the online environment. The visual images of products in the online environment are

perceived without stimuli and as a separate item from the physical product being presented, suggesting the importance of creating an atmosphere that includes stimuli that mimic the physical environment (Demangeot & Broderick, 2006). It is also suggested that consumers make connections in the online environment to what they know in the physical store environment by using display elements that are similar to what the consumer knows will work to close the gap that exists between the consumer and the merchandise that they cannot physically engage within the online channel (Ha et al., 2007).

Text has prescribed meanings that are easily understood by consumers; however, visual images can be interpreted in many ways which compromises the correlation of text with images. Content-based image retrieval (CBIR) is an application that identifies color and texture in an effort to improve matching text and visual images (Sclaroff, Cascia, & Sethi, 1999). Features of visual images such as color, texture, and shape are being used to store, index, search, and retrieve visual product information through the application of content-based image retrieval (CBIR) (Gangopadhyay, 2001). It is reported that the combination of visual images with text have improved the query process over just visual or just text queries, although visual images allow for more interpretation which can negatively affect the performance of the technical system (Sclaroff et al., 1999). It is also reported that colors that are used in low saturation and brightness indicate stronger vendor trust giving cues of benevolence, competence, integrity and predictability. On the other hand, colors that are used in high saturation and are vivid have a negative effect on

vendor trust being perceived by the consumer as aggressive (Papadopoulou & Pelet, 2011).

In addition, consumer's task orientation and motivation are important factors in the design of a website. Wang, Minor, and Wei (2011) stated that while consumers with a hedonic orientation are likely to favor a formal and appealing website than those with a utilitarian orientation. Kim and Niehm (2009) also suggested that online apparel retailers should consider the importance of entertainment in designing their websites because of the hedonic nature of apparel purchases. Cai and Xu (2011) suggested that the significance of website aesthetics should be the focus when selling hedonic products. When online retailing is viewed from a purely technical aspect, the consumer decision making process is thought to be a linear process that does not typically include emotional factors (De et al., 2013). However, when a consumer engages with a website without a shopping goal, it is often that their emotions are impacted by high aesthetic appeal as they evaluate the shopping choices (Wang et al., 2011). Tan and Wei (2006) also suggested that better website design can be achieved by including user behavior, such as user's memory and perception on navigation and visual effects where the understanding of cognitive mapping can be effective. Yen et al. (2007) also offered guidelines in designing an effective website including application layer, generic web design layer, and graph modeling layer.

Interactivity

Based on Alba et al. (1997), interactivity is defined as a continuous construct capturing the quality of two-way communication between two parties. Interaction with a

website occurs in different ways depending on the shopping goals and the expectations of the consumer. Different interactions require different information in order for the consumer to reach their goals based on the technological responses. In the context of online apparel shopping, Kim and Niehm (2009) reported that the greater the number of interactive features that allow the customer to customize their experience, the greater their perception of quality of information. Website quality is important for profit consideration of companies and can be realized through established design parameters (Cebi, 2013). Retailers that offer well designed websites are perceived as better service providers as the ease of navigating the website acts as a service that would be provided by a sales person in the brick and mortar environment (Cai & Xu, 2011). Hausman and Siekpe (2009) also suggested that in order to generate positive perceptions of the dimensions of usefulness and informativeness of the website, it is imperative that computer features be included in the website design. In doing this, it allows consumers to better understand the layout of the website, resulting in an increased navigation of the site. Yen et al. (2007) contended that the structure of the website design as the foundation for good quality websites is likely to have a positive effect on systematic (requirements of website features) and quantitative (mathematical programming) design evaluations, leading to website improvements.

One of the challenges with designing and implementing websites is that in order to make them work, there is a lot of technology involved. As consumers engage with the technology; however, they expect an experience that includes not just a technological application. This idea makes designing websites a challenge as developers are always

looking for new ways to enhance internet searches to produce and deliver what the consumer expects. Internet search systems are classified into three broad categories: 1) directory services such as Yahoo, 2) keyword searches such as Google, and 3) metasearches such as Web Compass (Paik et al., 2003). The performance of the technological architecture of a website is negatively impacted when there is an increase in traffic on the website, resulting in at least one or more points of failure in the architecture (Namuduri & Ram, 2001). When purchase tasks are considered, aesthetic formality of the website has a positive impact on satisfaction and aesthetic appeal has a positive impact on arousal (Wang et al., 2011). The ability of the website to download the elements of the website (e.g., pictures, text, links) is important to consumers (Namuduri & Ram, 2001). While a consumer is engaged in the process of downloading information from a website, it has been found that they are fine to wait longer if there is background music and color that is appealing (Cheng et al., 2009).

When consumers lack knowledge of technology or do not know how to engage in the online environment, they rely on the technology to guide them through the process of locating and purchasing merchandise (Hoffman & Novak, 1996). Consumers expect search process support which is used to differentiate successful companies from unsuccessful companies. As retailers experience with websites increase, the support during the search process also enhances (Muylle & Basu, 2004). It is suggested that online retailers can manipulate their websites to increase the ease of use for the consumer (Hoffman & Novak, 1997). If fixed markers or landmarks are used, they are likely to increase the speed at which a consumer learns their position within an area when

geometric messages are presented (Sheynikhovich & Arleo, 2010). Richer informational messages through signs, symbols, and images are viewed by the consumer as having a more important influence on purchase intention than the spatial layout and functionality of a website (Hopkins et al., 2009). Combining text and visual images together increases the likelihood that the consumer will find the target image as opposed to just text or visual images alone (Sclaroff et al., 1999). In addition, utilizing a content-based image retrieval system that relies on more than just one factor such as color, texture and shape increases the likelihood that the consumer will find what they are looking for and encourages cross-selling of merchandise (Gangopadhyay, 2001).

As consumer knowledge of technology progresses, they become more comfortable with navigating and using technology (Hoffman & Novak, 1996).

Consumers' levels of pleasure and attitude are positively impacted by their perceived ease of use of the website, indicating that the consumers' knowledge and ability to navigate through the virtual layout has an impact on their shopping behavior in the online channel (Manganari et al., 2011). In addition, as the consumer navigates throughout the website, their perception of that navigation experience influences a relationship with the vendor. That is, once consumers' understanding of the navigation process becomes more matures, they are likely to develop a positive relationship with the website (Demangeot & Broderick, 2006). Furthermore, Manganari et al. (2011) reported that, in the context of virtual store layouts, the greater the consumer's knowledge of online navigation, the easier it was for them to adjust to different layout patterns. However, such knowledge did not affect which store they selected (Manganari et al., 2011).

Information Quality

Information quality includes the content presented in a web site and can be assessed based on the dimensions of informativeness and security (DeLone & McLean, 2003). As a user becomes more experienced with a website, their expectation of information quality increases (Sorum et al., 2012). Kim and Niehm (2009) suggested that retailers should focus on aspects of information quality in website design based on the findings of the development of WebQual, which is a scale utilized to assess website quality. Dholakia and Zhao (2010) found that clear product information and the ease of finding information are two key factors of information quality that generate favorable evaluations of website quality. Now that transactions involving consumer credit cards can be engaged online, it is necessary to provide elements to protect the customer. The concept of transactional security is included in more current studies involving information quality (Chang et al., 2005). Wolfinbarger and Gilly (2003) refer security to "security of credit card payments and privacy of shared information" (p.193), realizing that the security issue is significant in predicting website quality when the user has purchase experience from the given website. As suggested, the perception of the lack of security is an obstacle to the development of business in the online distribution channel (Forsythe & Shi, 2003). Therefore, based on the extant literature, in the current study, information quality consists of informativeness and security.

Informativeness

Informativeness is defined as the completeness of information and the ability of the personalization of information to meet the consumer's needs (DeLone & McLean,

2003). As technology has progressed and become more available to consumers, their use of technology has increased leading to increased knowledge and comfort. When consumers are familiar with utilizing the internet and websites for shopping, they have a filter that allows them to compare information from websites that they might not have previously engaged. As such, this activity allows them to navigate the website more efficiently (Demangeot & Broderick, 2006). However, when consumers do not have the experience, they become confused during their attempt to navigate the website and will typically not complete their desired tasks (Demangeot & Broderick, 2006).

The level of consumer involvement in the purchase decision process also influences the assessment by the consumer of the information of a website (Williams & Kitchen, 2009). Websites that were perceived as convenient and useful (e.g., provided brand information, allowed for price comparisons and provided efficient delivery) were evaluated by consumers to be more compatible with online purchase transactions (Johnson et al., 2003). It has been found that the more price conscious the consumer is, the greater the influence that descriptive content has on the overall purchase decision (Gauzente & Roy, 2012). Kim and Niehm (2009) also reported that the perceived product value was positively impacted by the perception of positive information quality of the website. Specifically, realistic pictures on a website are important predictors of consumer attitudes toward the website, which consequently positively affect behavioral intentions (Bai et al., 2008). Furthermore, these researchers also found that in cross-cultural study, online Chinese customers of travel websites indicated a strong interest in contact

information of the company, destination information, language, layout and graphics of the website.

Retailers are constantly sending messages to the consumers during the shopping experience as the consumer engages with any element of the retailer including employees, displays, products, promotional material, transaction receipts, and so on. As such, consumers become confused with messages when visual communications are different from other messages on the website, leading to negative impressions even when the product is considered a good choice (Stahl, 1964). In a brick-and-mortar shopping experience, the customer engages with other people as they go through the decision making process. On the other hand, in the online environment, this is viewed as an independent activity (Hu & Jasper, 2006). Websites offer product and service reviews in an attempt to recreate the social messages that are found in the physical store. Kim and Lennon (2010) concluded that when adequate information was presented, both in text and visual presentations, perceived risk is less likely to exist, resulting in increased satisfaction, intent to purchase, and intent to revisit.

Security

According to Hasan and Abuelrub (2011), security is defined as the security of the transaction including payment and personal information. Measuring security is not as direct as originally believed as other quality factors impact a consumer's perception of security when they are new and unfamiliar with a web site (Wolfinbarger & Gilly 2003). As consumers develop perceptions of the interaction they experience with a website, it has an impact on perceived security. Consumers' perceptions of security of websites are

affected by the messages received from the presentation of the site, the ability to navigate, the vendors fulfillment, and seals of approval (Halaweh & Kamoun, 2012). Halaweh and Kamoun (2012) concluded that there is a difference in consumers' perceived security, a consumer might trust the information that is being presented on the website but does not view the website as secure when engaging with the website is required. Perceived security in the online environment was evaluated among consumers as the most concern when permanent working links, demos and online help tools, information accuracy and easy website navigation were utilized. However, background color, simple technical terms, live chat windows did not affect the consumers' perception of security (Halaweh & Kamoun, 2012).

Service Quality

Service quality is defined by Parsuraman et al. (2005) as phases of customer interaction with a website that encourages effective shopping, purchasing and delivery. Service quality includes all of the support that is delivered to the customer during the purchase and post-purchase process (DeLone & McLean, 2003). Sousa and Voss (2012) further stated that service quality are interactions that did not include service employees in the online environment. Parasurman, Zeithaml, and Berry (1988) developed an instrument called SERVQUAL to assess perceptions of service quality that included dimensions of tangibility, reliability, responsiveness, assurance, and empathy.

Parasuraman et al. (2005) further revised SERVQUAL to include dimensions specific to the internet, E-S-QUAL which has been used to assess the quality of website that are both service and product related. Many studies employed the five dimensions identified in

SERVQUAL (e.g., tangibility, reliability, responsiveness, assurance, and empathy) and later found that based on limitations of product and situation, not all five dimensions are applicable (Bauer et al., 2006; Lee & Lin, 2005; Pitt, Watson, & Kavan, 1995; Zhou et al., 2009). In further studying apparel websites it is necessary to consider post purchase activities that are found in the construct of fulfillment (Kim & Stoel, 2004).

Studies that focused on the purchase of a product instead of a service included customer service activities when evaluating websites (Flavian et al., 2006; Lee & Lin, 2005; Roman, 2007). When only purchase intentions were studied instead of actual purchase activity, customer service activities were not included in a dimension when evaluating website quality (Jones & Kim, 2010; Kim & Niehm, 2009). Therefore, based on the extant literature, service quality in the current study consists of fulfillment and responsiveness.

Fulfillment

Fulfillment is defined as the order management including the correct product in a timely manner (Cristobal et al., 2007). Other studies use the term reliability interchangeably with fulfillment (Bauer et al., 2006; Ladhari, 2010). According to Wolfinbarger and Gilly (2003), the dimensions of service quality that are most predominant are fulfillment and reliability. However, Wolfinbarger and Gilly (2003) reported that responsiveness of customer service has the least impact on overall website quality. Bauer et al. (2006) further added that expectations of customers in the online and offline channel are similar in that fulfillment is an important factor in determining quality of service. In order for an online retailer or service provider to be successful, it is

imperative that they are able to follow through on their promises in a timely and accurate manner (Ladhari, 2010). While it has been found that good website design has a positive effect on purchase intentions, the consumer evaluates the purchase only once the product is received and satisfactorily meets the consumer's expectations. This suggests that online retailers need to ensure to up fill orders and providing necessary customer service (Dholakia & Zhao, 2010).

Responsiveness

Cristobal et al. (2007) defined responsiveness as an online company's ability to complete transactions correctly, deliver personalized attention, and resolve service complaints. When consumers find a website to be easy to use (navigate), they perceive the company to be more concerned about the consumer (Halaweh & Kamoun, 2012). When a consumer evaluates the service quality of an online retailer, signs, symbols and artifacts have the greatest impact on their service responses (Hopkins et al., 2009). Customer service in the online channel is different than in the offline because human contact between customer and company is not present (Sousa & Voss, 2012). Parasuraman et al. (2005) suggested that it is possible to deliver high quality service in the online channel with little to no human contact as evidenced in a transaction. However, in recovery efforts, human contact is likely required.

Consumer Trust in the Online Environment

McKnight et al. (2002) defined trust as when a consumer is comfortable sharing personal information, making purchases, and acting on web vendor advice. Consumers experience in the online environment also affects their perceived risk in shopping online

whereas the greater the experience, the less the perceived risk (Almousa, 2011). When perceived risk is reduced through the use of tangible messages, consumers tend to evaluate the website and service positively. They also were more loyal to the website and were able to recall more information from their interaction (Koernig, 2003). Pizzuti and Fernades (2010) have stated that companies establish the level of trust with customers based on how complaints are handled, but a company's complaint recovery has little impact on the customers overall impression of ecommerce. Consumers who have little experience in the online channel find that online demonstrations and help tools are important because they aid them in their formation of trust for the website (Halaweh & Kamoun, 2012).

Corbitt et al. (2003) suggested that it is necessary for a consumer to build trust with the channel of online retailing before they are able to build trust with a chosen website. Researchers have stated that using the concept of trust in research can be a challenge as there are many different ways to operationalize it (Chang et al., 2005). The concept of trust is explained as when a customer is "comfortable sharing personal information, making purchases, and acting on web vendor advice – behaviors essential to widespread adoption of e-commerce" which overcomes perceived risk and insecurity (McKnight et al., 2002, p.334). Consumers experience with a vendor both in the brick and mortar store and in the online channel has a positive impact on trust for the vendor when they are considered in the pre-purchase stage of the decision making process (Halaweh & Kamoun, 2012). As the internet has grown in popularity, the concern for security and privacy has increased (Doherty & Ellis-Chadwick, 2010).

Corbitt et al. (2003) identified three factors that affect trust in online retailing. They are general e-commerce reputation, the consumer, and the web-site. McKnight et al. (2002) posited that there is a need for different trust building strategies for different target markets, such as a less experienced users needing more indications of safeguards and security. Harris and Goode (2004) suggested that service quality, perceived value, and satisfaction were among the antecedents of trust. Trust has been found to positively impact intention to purchase in online retailing (Chang et al., 2005). According to literature, consumers evaluate trust in three dimensions: competence ability of the trustee to do what the truster needs), benevolence (trustee caring and motivation to act in the truster's interests), and integrity (trustee honesty and promise keeping) establishing that specific attributes that relate to trust influence the consumer instead of one overreaching concept (McKnight et al., 2002).

Kim and Niehm (2009) reported that trust significantly predicts perceived value; however, it does not significantly predict perceived information and loyalty intentions in apparel shopping context. In addition, trust is influenced by perceived market orientation, site quality, technical trustworthiness and user's web experience (Corbitt et al., 2003). Therefore, the greater the trust the greater the participation in the online channel. McKnight et al. (2002) empirically validated measures that defined trust as multidimensional with four high-level interrelated constructs, including disposition to trust which positively relates to personal innovativeness, institution-based trust which positively relates to web experience, trusting beliefs which is highly correlated with

perceived website quality, and trusting intentions which is also highly correlated with perceived website quality.

In order for a consumer to trust the online channel, their perception of the channel impacts their trust by three primary sources, i.e., the reputation of the channel in general, their profile as a consumer, and the specific websites that they encounter (Corbitt et al., 2003). A well-employed website quality scale, SERVQUAL considers trust in employees, not institutional trust in the assurance dimension which does not take into account the elements of privacy and security that are different in the online channel (Wolfinbarger & Gilly, 2003). There are three dimensions of trust (i.e., competence, benevolence, and integrity) that were examined by creating normality items across situations that reflected perceptions of websites in general with terms such as "safeguards," "protect," "robust," and "encryption" (McKnight et al., 2002). Differences in online channel participation can be explained by trust which is predicted by perceived website quality and the internet experience of the user (Corbitt et al., 2003).

It is vital for online vendors to establish, communicate, and maintain consumers trust (Harris & Goode, 2004). Van Iwaarden et al. (2004) concluded that when a customer purchases a product, they expect the website to be trustworthy. Ladhari (2010) suggested that in order for consumers to adopt the online channel, it is essential that the website assure the consumer that any personal and sensitive information such as credit card are protected; hence, providing the feelings of security for the consumer. Kim et al. (2008) have suggested that when perceived risk of privacy and security was low, trust in the website was high which in turn positively influenced purchase intentions. Perceived

performance risk was found to have the greatest impact on purchase intentions (Forsythe & Shi, 2003). Shih (2004) identified the construct of overall web security as similar to the construct of trust in the website concluding that high web security had a positive effect on a consumer's attitude toward shopping online. When consumers view a website credible, they feel that the website is trustworthy and believable (Jun, Yang, & Kim, 2004). Results of a study conducted by Harris and Goode (2004) concluded that the relationship of loyalty is directly and indirectly related to trust, satisfaction, and service quality. When a website is perceived as being high quality, the vendor is perceived as being competent, honest, and benevolent (McKnight et al., 2002). Tan and Wei (2006) reported that participants expressed trust in a given website as a result of effective website design and user performance, which positively impacted intention to purchase and intention to recommend the website. In addition, overall trust for a company, known as institutional trust, can be promoted on a website through the use of seals of approval that identify security elements and detailed explanations of safety issues for users who are less experienced with websites (McKnight et al., 2002). Papadopoulou and Pelet (2011) posited that perceptions of trust are increased when a website offers a chart giving the consumer important information as to the organization of the website in addition to the use of appropriate colors to indicate a comfortable usability of the website.

It is also recommended that trade associations (e.g., consumer electronics association, direct marketing association) could be used in website design since their use positively impacts benevolence of an online vendor which is correlated to consumer probability of giving personal information and making a purchase. When customers have

a positive experience with a website, they have greater trust for the website (Zhou et al., 2009). The more satisfied a customer is with a website, the greater their trust for the website (Flavian et al., 2006). There are varying levels of trust that exist. As the relationship matures, the trust becomes more pronounced (McKnight et al., 2002). Corbitt et al. (2003) posited that trust is the center of online customer relationships and found that even though a level of risk is perceived, there is still a level of trust which allows for them to participate in the online channel. If customers perceive a website to be trustworthy, they are more likely to purchase from the website and give private information (Belanger, Hiller, & Smith, 2002). Udo et al. (2010) suggested that trust is no longer a competitive advantage but a necessity of doing business online as customers expect it.

Consumer Satisfaction

Satisfaction is defined as when customer's evaluations of a product or service with regard to their needs and expectations are met (Oliver, 1980). Doll and Torkzadeh (1988) defined satisfaction in the online environment as "the effective attitude towards a specific computer application by someone who interacts with the application directly" (p. 261). Kim and Stoel (2004) suggested that satisfaction in the online channel is a global measure of the entire website. Adopting Oliver's (1980) definition of consumer satisfaction, Bai et al. (2008) defined customer satisfaction "as customers' evaluations of a product or service with regard to their needs and expectations" (p. 393). When the technology system meets the needs of the user, satisfaction with the system is reinforced (Bai et al., 2008). Retailers are always interested in feedback about their websites and the

experiences that consumers have with them in order to make needed changes and to evaluate if the consumers experience is as intended by the retailer. Feedback that expresses the customer's expectations at the time of the transaction is different from the feedback received once the product is delivered and they are able to interact with it (Dholakia & Zhao, 2010).

Early instruments that were developed to assess satisfaction of technology focused on the satisfaction of information, not on the satisfaction of the end user which is needed based on the changes in technology (Doll & Torkzadeh, 1988). Research conducted by Bauer et al. (2006) included statements of the satisfaction which were studied as dependent variables of transaction stages to predict e-service quality. In a study of female online apparel shoppers who evaluated their perceptions of a website utilizing the WebQual instrument, three dimensions: 1) informational fit-to-task, 2) transaction capability, and 3) response time were found to be significant predictors of consumer satisfaction (Kim & Stoel, 2004).

Bai et al. (2008) also stated that consumer satisfaction is a very important construct as it mediates the relationship between website usability and purchase intentions. Furthermore, it is suggested that the functions of the technical applications impact a consumer's satisfaction with a website (Doll & Torkzadeh, 1988). Current research measures outcomes of website quality such as satisfaction (Wolfinbarger & Gilly, 2003). Kim and Stoel (2004) examined the influencing role of website quality dimensions on overall satisfaction of apparel shoppers. Early studies of online shopping reflected dissatisfaction of the shopping experience which often led to cart abandonment

(Hausman & Siekpe, 2009). Retailers can increase satisfaction by reducing performance risk associated with the product and transaction risk associated with the technical aspects of the transaction (Kim & Lennon, 2010).

Szymanski and Hise (2000) reported that the important factors of satisfaction in the online channel from the consumer perspective were convenience, site design, and financial security. Satisfaction with the merchandise order is one component of the conceptual framework that measures online etail quality (Wolfinbarger & Gilly, 2003). Furthermore, in studying online shopping of the travel industry, Jeong et al. (2003) concluded that website quality is an important factor of information satisfaction which leads to behavioral intentions. Kim and Stoel (2004) further stated that while the content and transaction related qualities were important to increase customer satisfaction, design qualities were not important.

Szymanski and Hise (2000) developed and empirically tested a conceptual model designed to assess a customer's online satisfaction which resulted in the identification of the factors of convenience, site design, and financial security. The online research firm Bizrate.com measures customer satisfaction through customer reported ratings that are given at the time of purchase and again after the merchandise is received. The rating items include ease of order, product selection, product information, price, on-time delivery, product representation, customer support, privacy policies and shipping and handling (Wolfinbarger & Gilly, 2003). Satisfaction along with perceived value and service quality is found to be antecedents of trust, which is a key driver of loyalty (Harris & Goode, 2004). However, Bauer et al. (2006) also found that including factors that

address emotional motives promote hedonic shopping and inhibit dissatisfaction. A well designed website has a positive impact on the attitude the consumer has toward the site and the products, while information quality is shown to have a positive impact on online shopping (Bai et al., 2008).

Doll and Torkzadeh (1988) suggested that since online retailing is a voluntary process that satisfaction leads to usage in the online channel. Woflinbarger and Gilly (2003) examined online consumers both in online and offline settings and concluded that four factors, i.e., website design, fulfillment/reliability, privacy/security, and customer service strongly predicted quality and satisfaction. In Kim and Stoel's (2004) study, they have found that positive satisfaction alone does not influence purchase behavior; however, other factors (e.g., product quality, merchandise selection and assortment, or price) have play an important role in influencing online purchase behaviors.

Consumer Loyalty in the Online Environment

Day (1969) suggested that loyalty occurs when a buyer devotes at least 50 percent of product purchase to a single brand. When a buyer is loyal to a brand, he or she is less likely to purchase impulsively and shop at fewer stores. Dick and Basu (1994) defined loyalty as the strength of the relationship between attitude and repeat purchase behavior as mediated by social norms and situational factors. Oliver (1999) defined consumer loyalty as a commitment to repatronize a preferred product or service consistently in the future. Anderson and Srinivasan (2003) further defined loyalty as it applies to the online environment as "the customer's favorable attitude toward an electronic business, resulting in repeat purchasing behavior" (p. 125).

The nature of new and ever changing technology has an impact on website design which may have caused frustration and irritation of the consumer in the online channel. This suggests the importance of creating websites that are easy to navigate, which consequently decreasing frustration that has found to positively impact behavioral intentions (Hausman & Siekpe, 2009). Consumers will spend more time browsing, which leads to greater purchase intentions when a website provides an engaging experience (Luo et al., 2011). Hur et al. (2011) found that satisfaction mediates the relationship between website quality and eloyalty.

Emotions that are felt by consumers can have an effect on their behavior in the retail store and their purchase intentions. Once a consumer makes the decision to shop, their emotional state affects their actual shopping behavior (Sherman, Mathur, & Smith, 1997). The Stimulus Organism Response (SOR) model was utilized to assess the impact of website quality on purchase behavior by showing that the website information (stimuli) affects emotions (satisfaction and perceived risk), which influences purchase intention and intention to revisit (Kim & Lennon, 2010). In an effort to compensate for the lack of senses that can be engaged in the online channel, websites should be designed to engage the greatest emotional effects possible in an effort to encourage purchase activity (Luo et al., 2011). Human factors also affect purchase and return intentions because of evaluations of the websites usefulness and entertainment, further suggesting that adding human features such as graphics or 3-D models would positively impact purchase intentions (Hausman & Siekpe, 2009). It has been found that when a consumer

perceived a website to be a one stop shopping experience, it positively affected their loyalty towards the website.

It is reported that positive trust and satisfaction with products has a positive effect on the long term relationship between customer and retailer (Tsao & Hsieh, 2012). As such, firms must understand the factors that positively impact intention to use and intention to purchase. However, few empirical studies have established the relationship among these factors (Chang et al., 2005). In addition, human and computer elements have been explained as elements of purchase and revisit intentions through uses and gratifications theory, technology acceptance model, and the concept of flow (Hausman & Siekpe, 2009). While uses and gratification theory suggests that consumers use a form of mass communication to meet their needs (Katz, Gurevitch, & Haas, 1973), technology acceptance model includes two behavioral beliefs: perceived ease of use and perceived usefulness that have tended to impact behavioral intentions (Davis, 1989), suggesting that greater customer experience with a website has a positive relationship with trust and loyalty (repurchase and eWOM) (Pizzuti & Fernades, 2010). In a recent study, researchers have found that satisfaction and trust positively influence eWOM only when eWOM communication is the mediator of commitment (Tsao & Hsieh, 2012).

Based on extent review of literature, it is suggested that consumer loyalty can be measured in terms of WOM, share of wallet, and repatronage intentions (e.g., Carpenter, 2008; Jayawardhena & Wright, 2009).

WOM

WOM is defined as exchanging information about a product or service experience in the online channel through traditional WOM and website bulletin boards, email, chat rooms, blogs, forums and other computer mediated communication tools (Tsao & Hsieh, 2012). Sherman et al. (1997) suggested that social messages in the consumer decision making process come from other people who are present in the physical store environment as the process is taking place. Social messages were found to increase the pleasure of the shopping experience, creating a positive impact on the perceived merchandise and service quality. As a result, social messages tend to influence perceived store image and patronage intention (Hu & Jasper, 2006). When the store environment is highly social, arousal and pleasure increases, which in turn, influence repurchase behavior (Baker et al., 1992). In addition, Sherman et al. (1997) reported that social messages have a positive impact on pleasure, which consequently influences the amount of money that a consumer spends in the store and how they feel about the store. WOM is an opportunity for individuals to share information about products and experiences (Hagel & Armstrong, 1997). Also, WOM communication is only engaged in when a consumer converts their trust and satisfaction into commitment; however, product type does not moderate commitment on WOM communication (Tsao & Hsieh, 2012).

Luo et al. (2011) identified four elements of virtual experiential marketing (VEM) and they are pleasure, community relationship, interaction, and flow. When employed by online retailer, these elements will arouse emotions which lead to increased loyalty. Hu and Jasper (2006) suggested that social meaning is important in visual merchandising

displays because it could enhance the consumers desire to shop in a given store. Cheung, Luo, Sia, and Chen (2009) posited that online WOM allows consumers to connect beyond their WOM network throughout the internet, where time and distance restrictions do not exist.

In a study focusing on the impact of news clips and customer testimonials, it is reported that negative customer testimonials produced a negative social message that offset the positive effect of the cues from news clips (Wang, 2003). Halaweh and Kamoun (2012) also reported that word of mouth and media reports positively affect the consumer pre-purchase knowledge when the message is from a reputable party. Wang (2003) examined the effects of news clips and word of mouth on trust and purchase intention and reported that both news clips and word of mouth had a positive effect on purchase intention. Specifically only news clips had a positive impact on trust when the source of the news was perceived as believable.

Share of Wallet

Meyer-Waarden (2007) defined share of wallet as the "share of category expenditures spent on purchases at a certain store" (p. 224). It was further defined as a significant performance metric for retailers (Kim & Lee, 2010). Many current studies focus on intent to purchase or repatronage intentions, but not on share of wallet (Chang et al., 2012; Jones & Kim, 2010; Kuan et al., 2008; Wells et al., 2011), others (Garland, 2004; Perkins-Munn et al., 2005) employed purchase intentions as a proxy for share of wallet because purchase intention and overall satisfaction were found to predict both actual purchase and share of wallet. Both transaction-specific satisfaction and satisfaction

over time were also found to have a positive effect on share of wallet. However, highly positive transaction-specific satisfaction levels were found to have a greater impact on share of wallet (Keiningham, Aksoy, Malthouse, Larieviere, & Buoye, 2014). Garland (2004) also reported that relationship duration is a crucial factor in gaining share of wallet. In addition, Friedman, Brown, and Taran (2011) stated that perceptions of store expertise were found to increase satisfaction and share of wallet in specialty stores.

Studies that focus on measuring share of wallet suggest that a longitudinal study, where actual purchase activity is measured over time, will yield more accurate share of wallet (Carpenter, 2008; Cooil, Keiningham, Aksoy, & Hsu, 2007; Keiningham, Aksoy, Buoye, & Cooil, 2011; Keiningham, Aksoy, Malthouse, Lariviere, & Buoye, 2014; Meyer-Waarden, 2007). Meyer-Waarden (2007) concluded that the longer customer relationships, as evidenced through customer loyalty programs, the greater the positive effect on share of wallet. Carpenter (2008) reported that longitudinal loyalty is positively affected by satisfaction, which in turn, influenced word-of- mouth and share of wallet behaviors. Magi (2003) found that while satisfaction has a small effect on share of wallet, consumer economic shopping orientation (i.e., low vs. high economic orientation) has a stronger impact on share of wallet (Magi, 2003). In addition, Mattila (2007) found that affective commitment is an important factor in share of wallet in lodging nights at a hotel brand. Keiningham, Aksoy, Buoye, and Cooil (2011) stated that the rank of a company's brands in the mind of the consumers tend to produce a greater impact on share of wallet than satisfaction.

Furthermore, Friedman et al. (2011) found that for specialty stores, the distance a customer has to travel, has a negative impact on share of wallet, implying the importance of shopping convenience. Reisenwitz et al. (2007) found that older, inexperienced computer user (i.e., seniors) tend to use the internet as an informational site and are not likely to purchase. However, although Mattila (2007) reported that age and income was found to have no impact on share of wallet (Mattila, 2007), emotional loyalty when purchasing apparel has a positive impact on share of wallet (Kim & Lee, 2010).

Repatronage Intentions

Pizzuti and Fernades (2010) stated that when a consumer trusts the technology system and the company, they are more likely to engage in positive WOM and repurchase intentions. Dholakia and Zhao (2010) found that fulfillment satisfaction had a positive impact on repurchase intentions. Researchers have also found that service recovery (e.g., communications after the purchase, quickly resolving a complaint) is a predictor of repurchase intentions because once the company has, at minimum, attempted to resolve the service issue, the customers are likely to appreciate the effort and consequently are likely to spread positive WOM (Hsieh & Tsao, 2014). In addition, when customers are satisfied with their shopping experiences, they are more likely to revisit the website (Kim & Lennon, 2010). Many studies (Aladwani & Palvia, 2002; Bauer et al., 2006; Forsythe & Shi, 2003; Ganesh et al., 2010; Goldsmith, 2002; Kim & Stoel, 2004; Kwon & Noh, 2010) focused on purchase intentions and did not include repurchase intentions; this suggests the need to include actual purchase activity and repurchase intentions in future studies.

Proposed Conceptual Framework

Based on extant review of literature, in Figure 1, the proposed conceptual framework is presented based on four different research stream: website quality (Wolfinbarger & Gilly, 2003), consumer satisfaction (Oliver, 1980), consumer trust (McKnight et al., 2002), and consumer loyalty (Dholakia & Zhao, 2010). Previous studies suggest that website quality is a multidimensional construct, comprising three major features: system quality, information quality, and service quality (DeLone & McLean, 2003). Consumers' positive evaluations of these three major features reflecting quality of a company's website are likely to increase their favorable attitudes and behaviors toward the website (Ho, Kuo, & Lin, 2012). In addition, the literature further suggests that consumer's formation of overall perceived quality of the website can be predicted by the quality of three major features of a company's website (Hsieh & Tsao, 2014). Consumer satisfaction literature suggests that consumers are likely to elicit emotional response based on an overall cumulative experience, resulting from an evaluation of online shopping visit and of a company's offer in conjunction with the consumers' fulfilled expectations (Anderson, Fornell, & Lehmann, 1994; Oliver, 1980). Consumer trust literature emphasizes the confidence a consumer establishes in terms of quality and reliability of a company's offerings (Gabarino & Johnson, 1999). Finally, consumer loyalty encapsulates consumers' favorable attitudes and commitments toward the company that may result in different marketing outcomes.

Therefore, combining these research streams, the study's conceptual model suggests that consumers' overall evaluations of website quality are likely to be influenced

by their evaluations of various features of a company's website. Furthermore, consumers' overall evaluations of website quality is expected to influence their satisfaction and trust toward the company, which in turn, both satisfaction and trust are likely to influence loyalty. In addition, satisfaction is also expected to exert the influence on trust as well.

System Quality

Web Appearance

Interactivity

Information Quality
Informativeness

Overall Perceived
Website Quality

Security

Service Quality

Fulfillment/Reliability

Responsiveness

Figure 1. Conceptual Model of Consumer Loyalty in Online Shopping Environment

Hypothesis Development

Hypothesis 1: The Relationship between System Quality Dimension of Website Quality and Overall Perceived Website Quality

Researchers refer system quality as the technical elements of the website that make it easy to navigate (DeLone & McLean, 2003; Palmer, 2002). Akinci et al. (2010) identified factors of system quality that include the availability of the website, the ability to move throughout the website, and download speeds. According to the extant literature,

there are two dimensions of system quality that have been extensively studied; web appearance and interactivity (Ladhari, 2010; Wolfinbarger & Gilly, 2003).

The appearance of the website is the first impression that a customer receives when engaging in an online retailer. Consumers are not only impressed with the website design, they also look for other elements of the website that reflect the appearance of the website to form their impression, including the fonts, colors, layout, style, and the user's ability to navigate the site. Using the WebQual instrument, Kim and Stoel (2004) found that web appearance significantly influenced consumers' perceptions of quality of apparel websites. That is, the learning curve involved in technology associated with online retailer could be influenced by the ability of the user to navigate the website.

In addition, processing speed and system availability are also important elements associated with the interactivity of the website (Chiou et al., 2010; Hasan & Abuelrub, 2011). Aladwani and Palvia (2002) reported that technical adequacy of the website is positively correlated with perceived website quality. Cebi (2013) also added that technical adequacy was identified as the most important aspect of design that has the great potential to influence consumers' evaluations of the quality of the website. Based on the understanding that if the technological aspects of the website are not functioning properly, the design elements will also not function as initially expected. In order for a user to assess the quality of a website, it is necessary for the technological elements to function correctly and properly. Web appearance and interactivity aspects of website are viewed as the important dimensions associated with system quality as system quality measures ease-of-use, functionality, reliability, flexibility, data quality, portability,

integration and importance (DeLone & McLean, 2003). Furthermore, a number of studies have reported that there was a significant relationship between system quality and overall perceived website quality (Aladwani & Palvia, 2002; Demangeot & Broderick, 2006; Sorum et al., 2012; Wells et al., 2011). Thus, we hypothesize that:

H1: Overall perceived website quality will be influenced by a) web appearance and b) interactivity dimensions of system quality.

Hypothesis 2: The Relationship between Information Quality Dimensions of Website

Quality and Overall Perceived Website Quality.

Information quality includes the content presented in a web site and can be assessed based on the dimensions of informativeness and security (DeLone & McLean, 2003). Website features that generate positive perceptions of usefulness and informativeness, while avoiding irritation increases the likelihood to purchase, supporting the importance of designing the website (Hausman & Siekpe, 2009). According to Sorum et al. (2012), as a user becomes more experienced with a website, their expectation of information quality increases. Informativeness includes elements of a website such as accuracy of the information and system, timeliness, and reliability of the information (DeLone & McLean, 2003). Specifically, a number of studies have reported that information quality has a direct, positive relationship to overall perceived website quality (Aladwani & Palvia, 2002; Jones & Kim, 2010; Kuan et al., 2008).

Early models involving the internet do not include security as a dimension of information quality because of the technical limitations of the internet where security was controlled by the system and limited access that the user had (Ladhari, 2010). As the

technology has developed and consumers' exposure to the internet has increased, the security issue related to the use of the internet as a transactional channel has also pronounced. Now that transactions involving consumer credit cards can be engaged online, it is necessary to provide elements to protect the customer. The concept of transactional security is included in more current studies involving information quality (Chang et al., 2005). Transactional security is necessary in order to complete the purchase process online and consumers will evaluate a website for transactional security. The locked padlock in the URL is a sign of a secured transaction.

Wolfinbarger and Gilly (2003) refer security to "security of credit card payments and privacy of shared information" (p.193), realizing that the security issue is significant in predicting website quality when the user has purchase experience from the given website. As suggested, the perception of the lack of security is an obstacle to the development of business in the online distribution channel (Forsythe & Shi, 2003). Ho et al. (2012) found that information quality has a positive relationship on overall perceived website quality. Therefore, we propose that:

H2: Overall perceived website quality will be influenced by a) informativeness and b) security dimensions of the information quality.

Hypothesis 3: The Relationship between Service Quality Dimension of Website Quality and Overall Perceived Website Quality.

According to Parasuraman et al. (2005), service quality is defined as "the extent to which a Web site facilitates efficient and effective shopping, purchasing, and delivery" (p. 217). DeLone and McLean (2003) have suggested that since service quality includes

all of the support that is delivered to the customer during the purchase and post-purchase stages; therefore, fulfillment and responsiveness dimensions of service quality are important in assessing quality of service. Fulfillment is defined as the order management including the correct product in a timely manner (Cristobal et al., 2007). Fulfillment and responsiveness indicate that an actual purchase has taken place and that a customer can evaluate the after purchase experience. However, a number of studies focus on behavioral intentions, not actual purchase intentions (Shih, 2004; Sousa & Voss, 2012). In addition, Kim and Stoel (2004) found that when studying purchase intentions of apparel websites it is not necessary to consider fulfillment as a dimension of service quality because actual merchandise is not received which is where the fulfillment dimension is realized. Instead, Demangeot and Broderick (2006) posited that when shopping, online customers do not think like computer users and that they want to closely examine the product they have purchased. This suggests that fulfillment should be captured as a dimension of service quality.

Responsiveness to a purchase event with a customer was not found to be a separate dimension because consumers evaluate the prospective recovery services before a problem occurs (Bauer et al., 2006). However, the seminal findings of Parasuraman et al. (2005) contradict this finding and suggest responsiveness as a separate construct as evidenced in the E-RecS-Qual scale. Srinivasan et al. (2002) concluded that the caring and attention that an online retailer offers to its customers during the purchasing process are important elements when evaluating the quality of the website.

Lee and Kozar (2006) also reported that consumers' positive evaluations of service quality tend to influence their evaluation of website quality. Information systems practitioners also found service quality to be a valid measure of website quality (Pitt et al., 1995). Specific to the context of florist website, researchers have reported a positive relationship between service quality and overall perceived website quality (Chen et al., 2013). Likewise, Liu, Du, and Tsai (2009) also reported that the positive promptness of service quality in business websites was found to have a positive impact on website quality evaluation. In addition, Udo et al. (2010) found that service convenience has a significant positive influence on website quality. Therefore, we propose that:

H3: Overall perceived website quality will be influenced by a) fulfillment and b) responsiveness dimensions of the service quality.

Hypothesis 4: The Relationship between Overall Perceived Website Quality and Consumer Satisfaction

Overall perceived website quality is defined as the overall perception of how a user evaluates a website (Aladwani & Palvia, 2002). Satisfaction is defined as when customer's evaluations of a product or service with regard to their needs and expectations are met (Oliver, 1980). Website quality, therefore, involves the overall customer's perceptions, whereas satisfaction is the outcome of the customers' expectations and needs being met. The outcome of satisfaction is an action a consumer takes in relation to purchase activity.

Researchers have found that overall perceived website quality was positively related to satisfaction in a context of an online book retailer (Harris & Goode, 2004). Bai

et al. (2008) also found that overall perceived website quality has a direct and positive impact on customer satisfaction among Chinese consumers when visiting travel websites. In addition, Kim and Lennon (2010) further reported that customers expressed a greater satisfaction with the quality of a website in relation to the amount of information that was provided. That is, the more information the website provided, the greater the satisfaction. Zhou et al. (2009) found that website quality has a significant positive effect on satisfaction. Therefore it is recommended that the online retailers need to focus on delivering high quality website because it likely to enhance consumer satisfaction. Hence, it is expected that:

H4: Consumer satisfaction will be influenced by overall perceived website quality.

<u>Hypothesis 5: The Relationship between Overall Perceived Website Quality and</u> <u>Consumer Trust</u>

McKnight et al. (2002) defined trust in the online environment as when a consumer is comfortable sharing personal information, making purchases, and acting on web vendor advice. Corbitt et al. (2003) suggested that consumers were likely to trust a reputable company when engaging in business activity. Furthermore, they suggested that when their positive online experience with the website increases, their trust towards that online retailer was likely to enhance because their perceived risk in doing online business tended to be lower. Forsythe and Shi (2003) defined perceived risk in internet shopping as "the subjectively determined expectation of loss by an internet shopper in contemplating a particular online purchase" (p. 869). Almousa (2011) found that

performance risk (e.g., the product not performing as expected) and time risk had a strong negative influence on online apparel purchases, suggesting that the perceived risk influenced the ability of the consumers to trust the website. Likewise, Belanger et al. (2002) also found that favorable website quality has a positive impact on perceived trustworthiness of an e-commerce website. Also, McKnight et al. (2002) reported that perceived website quality positively influenced trust when utilizing a service website. Van Iwaarden et al. (2004) concluded that customers who purchase from a website want the website to be trustworthy. Similarly, Flavian et al. (2006) stated that customers who purchased from a website tended to evaluate the website in a positive light, which in turn, was likely to influence his/her trust towards the website. Lee and Lin (2005) also have suggested that trust for an online retailer must exist in order for the customer to positively evaluate the quality of the website. Thus, it is hypothesized that:

H5: Consumer trust will be influenced by overall perceived website quality.

Hypothesis 6: The Relationship between Consumer Satisfaction and Consumer Trust

Flavian et al. (2006) concluded that as customer satisfaction increased so did the trust toward the website. Tsao and Hsieh (2012) found that when a customer is satisfied with the quality of a website, he or she is likely to trust that website. On the other hand, a customer who is not as familiar with a website, he/she is less likely to develop trust (Pizzuit & Fernades, 2010). Zhou et al. (2009) concluded that consumer satisfaction significantly affects their trust of a website. Satisfaction influences trust in the online sales of CDs and books (Ribbink, van Riel, Liljander, & Streukens, 2004); however, Lee

and Lin (2005) found that for online bookstores trust influenced satisfaction. Kim and Stoel (2004) examined trust as a dimension of satisfaction and determined that it was not significant. Perceived risk does not significantly impact satisfaction and it is posited that customers are familiar with the online context and expect a website to be trustworthy (Udo et al., 2010). Kim and Lennon (2010) further concluded that perceived performance risk and transaction risk had negative effects on satisfaction but that financial risk did not impact satisfaction when purchasing apparel online. Therefore, we hypothesize that:

H6: Consumer trust will be influenced by satisfaction.

Hypothesis 7: The Relationship between Consumer Satisfaction and Consumer Loyalty

While some researchers have argued that when a customer is satisfied with the product and/or service, it may not be enough for them to promote positive WOM because customer satisfaction must be converted into a commitment toward the company before the customer will engage in WOM (Tsao & Hsieh, 2012), others have reported that consumer satisfaction is likely to influence consumer loyalty as measured in terms of WOM and share of wallet (Carpenter, 2008). Friedman et al. (2011) also found that satisfaction has a positive effect on share of wallet in specialty apparel stores, indicating that when a customer is satisfied with their experience they will spend more money. Magi (2003) reported that customer satisfaction has a positive effect on share of wallet. However, the economic orientation of the customer exerted stronger impact on share of wallet than satisfaction, suggesting that even if the customer had a positive experience if they do not have the financial means, they will not spend more money (Magi, 2003). Perkins-Munn et al. (2005) concluded that there is a direct linear relationship between

overall satisfaction and share of wallet, finding that the more satisfied a customer is the more money they will spend. Other researchers have also reported similar findings that share of wallet is positively affected by customer satisfaction (Cooil et al., 2007; Keiningham et al., 2014).

While others examined consumer loyalty in terms of WOM and share of wallet (Carpenter, 2008; Tsao & Hsieh, 2012), a number of studies examined consumer loyalty in terms of purchase and repatronage intentions (Cristobal et al., 2007; Forsythe & Shi, 2003; Koo, Kim, & Lee, 2008). For example, Harris and Goode (2004) found that loyal consumers are more likely to revisit a website and purchase intentions are greater. Bai et al. (2008) also reported that satisfied consumers have a high degree of possibility to engage in purchase intentions. Likewise, Zhou et al. (2009) reported that satisfaction has a positive effect on the consumer's behavioral intention to purchase and revisit the website. Hur et al. (2011) have also reported similar findings that satisfaction positively impacted loyalty. Likewise, in an online shopping context, Anderson and Srinivasan (2003) also found that e-satisfaction positively influenced e-loyalty. Hence, we propose that:

H7: Consumer loyalty as measured in terms of a) WOM, b) share of wallet, and c) repatronage intention will be influenced by consumer satisfaction.

Hypothesis 8: The Relationship between Consumer Trust and Consumer Loyalty

Tsao and Hsieh (2012) also found that customers are only willing to spread positive eWOM when they trust the company. Harris and Goode (2004) examined a

framework of trust as the driving factor of loyalty in the online distribution channel and found that trust is a key driver of loyalty. Corbitt et al. (2003) concluded that the higher the level of trust towards the e-commerce website, the greater the likelihood to purchase the product from that website. Bonifield et al. (2010) further added that a website messages (e.g., a seal of approval) signals trust and influences how the consumer interpreted information on the website such as the return policy, decreasing their perceived performance risk.

Pizzuti and Fernades (2010) posited that loyalty in the online context only exists when there is degree of trust because of the absence of physical contact with the product. McKnight et al. (2002) stated that the integrity a vendor communicates positively correlates with intentions to purchase. In addition, a study of website design that focused on one computer firm's website found that trust significantly impacted intention to purchase (Tan & Wei, 2006). Zhou et al. (2009) contended that when initial trust is built on the website, the customer will purchase the product from the website. Kim et al. (2008) reported that consumer trust has a strong positive effect on the intention to purchase. However, the extant literature on the relationship between trust and loyalty does not classified loyalty into the three dimensions of WOM, share of wallet, and repatronage intention, indicating a gap in literature. Thus, it is expected that:

H8: Consumer loyalty as measured in terms of a) WOM, b) share of wallet, and c) repatronage intention will be influenced by consumer trust.

Summary

This chapter described the theoretical foundation for the dissertation as well as the constructs to be tested. Based on a review of pertinent literature, the conceptual model was introduced and six testable hypotheses were developed. The conceptual model will be empirically tested to investigate the relationships of website quality, consumer satisfaction, consumer trust, and loyalty, specifically as expressed through e-WOM, share of wallet, and repatronage intention. The next chapter outlines the research design and methodology to be employed in the dissertation.

CHAPTER III

RESEARCH METHODOLOGY

This chapter presents the research design employed to examine the hypothesized relationships proposed in the current study. Specifically, this chapter includes four major sections: (1) Instrument Development; (2) Sample and Data Collection Procedures; (3) Statistical Analysis; and (4) Summary.

Research Purpose and Objectives

As discussed in Chapter I, the purpose of this study is to propose and empirically examine an integrative model of consumer loyalty within an apparel online shopping context of Baby Boomer online users. Prior to testing the following objectives, this study first seeks to explore the applicability of the construct of website quality with baby boomers. Assuming the construct of website quality is valid, the specific research objectives guiding the study are:

- To examine the associations between website quality and overall perceived website quality;
- 2. To examine the associations among overall perceived website quality, consumer satisfaction, and trust; and
- 3. To examine the associations among consumer satisfaction, trust, and consumer loyalty.

4. Details are provided below about research methodology employed to accomplish these objectives.

Instrument Development

A questionnaire was developed based on a review of the extant literature. Relevant measurement items were compiled into a prototype questionnaire. Therefore, a structured written questionnaire was developed which consists of four major sections. In the first section, the participants responded to general questions related to their online shopping experiences that occurred in the past six months. Next, the participants evaluated multiple items related to dimensions of website quality (i.e., system quality, information quality, and service quality) and their overall perceived website quality. In the third section, participants evaluated their satisfaction, trust, and loyalty toward the website. The final section includes share of wallet and demographic information of the participants (see Appendix A).

Measures

Table 2 summarizes the constructs and variables that are employed in the survey. Scales were selected from a review of literature and are found to have satisfactory levels of reliability (Cronbach's α ranging from 0.63 to 0.97). Unless otherwise stated, constructs were measured using a five-point Likert-type scale indicating a level of agreement with each statement ranging from "strongly disagree" (1) to "strongly agree" (5). Demographic variables (age, gender, education, income) and general questions related to participants' shopping experience were measured using categorical scales.

Website Quality

Based on a number of theoretical views related to dimensionality of website quality (i.e., multidimensional), the current study conceptualizes website quality as consisting of three dimensions that are relevant to consumers when experiencing the website: system quality, information quality, and service quality. The tri-dimensional conceptualization of website quality has been widely investigated in a number of studies (e.g., DeLone & McLean, 2003; Ho et al., 2012; Hsieh & Tsao, 2014; Kuan et al. 2008).

First, the system quality of a website in the current study is conceptualized as consisting of two sub-dimensions: web appearance and interactivity. Web appearance was measured using three items (e.g., "the website looks organized," and "the website is visually pleasing") adapted from Aladwani and Palvia (2002) and Kim and Stoel (2004). For interactivity, the construct was measured using eleven items (e.g., "the website looks easy to navigate through," and "the website is always up and available") adapted from Aladwani and Palvia (2002), Wolfinbarger and Gilly (2003), Kim and Stoel (2004) and Parasuramen et al (2005). As a result, the system quality scale consisted of fourteen items. Participants evaluated all fourteen items assessing system quality of a website on a five-point Likert-type scale where 1 = "strongly disagree" and 5 = "strongly agree."

Second, the information quality of a website is conceptualized as consisting of two sub-dimensions in the current study: informativeness and security. Informativeness was measured using five items (e.g., "the content of the website is acurate," and "the content of the website is concise") adapted from Hausman and Siekpe (2009), Aladwani and Palvia (2002), and Kim and Stoel (2004). In assessing security, the scale consisted of

five items (e.g., "the website has adequate security features," and "my privacy is protected at this site") adapted from Wolfinbarger and Gilly (2003), Kim and Stoel (2004), and Parasuraman et al (2005). Thus, the information quality scale consisted of ten items. Participants evaluated all ten items measuring information quality of a website on a five-point Likert-type scale where 1 = "strongly disagree" and 5 = "strongly agree."

Lastly, the service quality of a website is also conceptualized as consisting of two sub-dimensions in the current study: fulfillment/reliability and responsiveness.

Fulfillment/reliability was measured using five items (e.g., "I got what I ordered from this site," and "the product that came was represented accurately by the website") adapted from Wolfinbarger and Gilly (2003) and Parasuramen et al (2005). To measure responsiveness, the scale consisted of eight items (e.g., "the company is willing and ready to respond to customer service needs," and "inquiries are answered promptly") adapted from Aladwani and Palvia (2002), Wolfinbarger and Gilly (2003), and Parasuramen et al. (2005). Therefore, the service quality scale consisted of thirteen items. Participants rated all thirteen items measuring service quality of a website on a five-point Likert-type scale where 1 = "strongly disagree" and 5 = "strongly agree."

Overall Perceived Website Ouality

Overall perceived website quality was measured using five items (e.g., "overall, the website worked very well technically," and "the website was simple to navigate") adapted from McKnight et al. (2002) and Yoo and Donthu (2001). Participants evaluated all five items measuring overall perceived website quality on a five-point Likert-type scale where 1 = "strongly disagree" and 5 = "strongly agree."

Consumer Satisfaction

Satisfaction was measured using two items (e.g., "I am satisfied with my decision to visit the website," and "I think I made the right decision by visiting the website") adapted from Bai et al (2008). Participants evaluated both items measuring satisfaction on a five-point Likert-type scale where 1 = "strongly disagree" and 5 = "strongly agree." *Trust*

Trust was measured using five items (e.g., "I feel good about how things go when I do purchase or browse on this website," and "in general, I feel that this website is competent at serving its customers") adapted from McKnight et al. (2002). Participants rated all five items measuring trust on a five-point Likert-type scale where 1 = "strongly disagree" and 5 = "strongly agree."

Consumer Loyalty

Based on the extant literature on loyalty, the current study conceptualizes loyalty as a tri-idimensional construct, consisting of word-of-mouth (WOM), share of wallet, and repatronage intention (e.g., Carpenter, 2008; Chang et al. 2009; Hsieh & Tsao, 2014; Hur et al. 2011; Pizzutti & Fernandes, 2010; Srinivasan et al. 2002). In addition, WOM, share of wallet, and/or repatronage intention have been extensively examined in many previous studies to capture loyalty; however, a few studies have treated loyalty as a tridimensional construct (see exception for Cheng, Zhang, & Xu, 2009; Dick & Basu, 1994). In addition, these three dimensional constructs of loyalty tend to capture cognitive, affective, and conative aspects of loyalty (Oliver, 1999).

WOM

WOM was measured using three items (e.g., "I am likely to encourage friends and others to do business with this site," and "I always refer my acquaintances to this website") adapted from Parasuramen et al. (2005), Kim and Niehm (2009), and Srinivasan et al. (2002). Participants rated all three items measuring WOM on a five-point Likert-type scale where 1 = "strongly disagree" and 5 = "strongly agree."

Share of Wallet

Share of wallet was measured using categorical scales (i.e., "Out of every \$1,000 you spend online, how many dollars do you spend at this website?" and "Out of every 10 purchases you make online, how many purchases are made at this website?") adapted from Carpenter (2008).

Repatronage Intention

Repatronage intention was measured using five items (e.g., "I am likely to purchase from apparel (clothing) websites within the next six months," and "I intend to purchase through this website in the near future") adapted from Bai et al (2008), Yoo and Donthu (2001) and Kim and Niehm (2009). Participants rated all five items measuring repatronage intention on a five-point Likert-type scale where 1 = "strongly disagree" and 5 = "strongly agree."

Demographic Information and General Questions

Demographic information was captured including (1) gender, (2) year of birth (3) age, (4) perceived age, (5) ethnicity, (6) annual gross income, (7) employment status, (8) annual household income, and (9) country of residence, and were assessed through

categorical scales. General questions related to frequency of online browsing, dates and times of online visit, and actual online purchase were assessed using open-ended questions. The qualifying survey captured age and online apparel purchase behavior.

Table 2. List of Constructs

Construct	Variable	# of Items	Item description	Source
System Quality	Web Appearance	3	 The website looks organized The website is visually appealing The display pages within the website are easy to read 	Aladwani & Palvia (2002) Kim & Stoel (2004)
System Quality	Interactivity	11	 The website looks secured for carrying out transactions (e.g. uses SSL, digital certificates, etc.) The website looks easy to navigate The website has adequate or effective search functions The website is always up and available The website has valid links (hyperlinks) The website can be personalized or customized to meet one's needs The web pages load fast in the website The website is easy to access (i.e. has a reflective and widely registered name) 	Aladwani & Palvia (2002)

			 It is quick and easy to complete a transaction The website is a preferable alternative to calling customer service or sales This site launches and runs right away Wolfinbarger & Gilly (2003) Kim & Stoel (2004) Parasuraman et al. (2005)
Information Quality	Informativeness	5	 The website is a good source of product information The content of the website is concise The content of the website is accurate The website allows me to interact with it to receive tailored information The website adequately meets my information needs
Information Quality	Security	5	 My privacy is protected at this site My transactions are safe with this website The website has adequate security features The website keeps my personal information safe The website protects information about my credit card Wolfinbarger & Gilly (2003) (2004) Kim & Stoel (2004) Parasuraman et al. (2005)
Service Quality	Fulfillment/Reli ability	5	• The product that came was represented accurately by the website Wolfinbarger & Gilly (2003)

Service	Responsiveness	8	 I got what I ordered from this site The product is delivered by the time promised by the company The company makes items available for delivery within a suitable time frame The website is truthful about its offerings It is easy to find contact Aladwani & Palair (2002)
Quality			information on the website (e.g. e-mail addresses, phone numbers, etc.) It is easy to find information related to customers' policies on the website (e.g. privacy and dispute details) It is easy to find information related to customer service on the website The company is willing and ready to respond to Palvia (2002) Wolfinbarger & Gilly
			customer service needs • When I have a problem, the company shows a sincere interest in solving it • Inquiries are answered promptly • The company provides me with convenient options for returning items • The website handles product returns well

Overall perceived website quality	5	 Overall, the website worked very well technically Visually, the website resembled other sites I think highly of The website was simple to navigate On the website, it was easy to find the information I wanted The website is of high quality 	McKnight et al. (2002) Yoo & Donthu (2001)
Satisfaction	2	 I am satisfied with my decision to visit the website I think I made the right decision by visiting the website 	Bai et al. (2008)
Trust	5	 I feel good about how things go when I do purchase or browse on this website I always feel confident that I can rely on this website to do business when I interact with them In general, I feel that this website is competent at serving its customers I feel that most internet vendors are good at what they do I feel assured that legal and technological structures adequately protect me from problems on this website 	McKnight et al. (2002)

Loyalty	WOM	3	 I am likely to encourage friends and others to do business with this site I would say positive things about this website to other people I always refer my acquaintances to this website
Loyalty	Share of Wallet	3	 How much did you spend at the website in the past 6 months? Out of every \$500 you spend online, how many dollars do you spend at this website? Out of every 10 purchases you make online, how many purchases are made at this website?
Loyalty	Repatronage Intention	5	 I am likely to purchase from apparel (clothing) websites within the next six months I intend to purchase through this website in the near future It is likely that I will purchase through this site in the near future I am likely to revisit this site in the near future I consider myself to be a loyal patron of this website Kim & Niehm (2009)

Sample and Data Collection Procedures

Pretest

To assess face validity and content validity, a draft structured survey was evaluated by a panel of experts, including college professors, online shoppers, and retail managers (at least two people from each category). The researcher addressed changes based on their recommendation. Next, the survey was pretested as recommended when an instrument includes measures from various sources (Hair, Black, Babin, & Anderson, 2010). A pre-test of the survey was distributed to fifteen participants in order to ensure relevancy, clarity, and meanings of terms and contents. In addition, participants in the pretest were individuals who identify themselves as baby boomers and who have visited a website or made an online purchase. These individuals were recruited from networking activities through work and community encounters.

Sample

The population of interest is consumers aged 50 - 68 years old. Furthermore, the participants are individuals who self-identify as baby boomers and have purchased apparel online in the past six months. In recruiting participants for the study, an online panel called Amazon Mechanical Turk (mturk.com) was utilized, which consists of panel members who agree to complete human intelligence tasks (HIT) that are requested by requestor. Additionally, each HIT includes the instructions to complete the task and a financial value for completing the task to the satisfaction of the requestor (Paolacci, Chandler, & Ipeirotis, 2010). Researchers state that online panels are commonly used to reach participants that meet certain requirements (Grohol, 2011). Online panel members

who agree to participate in the panel survey are required to give identifying information, including information necessary to be paid for their participation. The ease of access to participants, the cost effectiveness, and the ease of online survey software use (e.g., Qualtrics) with Amazon Mechanical Turk (mturk) have made it an option for academic research that has been widely used (Grohol, 2011). A number of researchers have stated that results of an mturk survey are just as reliable when compared to an internet survey and a commonly used university student sample (Buhrmester, Kwang, & Gosling, 2011; Paolacci et al., 2010). However, some researchers address some concerns over the use of mturk for data collection, including the issue of privacy and confidentiality with regard to participants' anonymity. However, when collecting data through mturk using online survey software (e.g., Qualtrics), any identifying information cannot be viewed by the requestor. As such, this makes the IRB request process similar to other forms of research (Paolacci et al., 2010).

The use of online panels has presented several advantages in consumer research. Dennis (2001) posits that the benefits of online panels outweigh possible panel effects because of the advantages including access to participants, targeted sampling, rapid data collection, and background data on participants. Arguments in support of online panels suggest that purposive sampling is easier to achieve and results are accurate results (Baker, 2011). In addition, online panels allow for participants to engage in panels that connect with their interests, allowing researchers to tailor incentives to the interests of the panel members (Goritz & Luthe, 2013). Online panels can also be employed when there

are budget and time constraints (Baker, 2011) because they are a cost-effective way to conduct surveys (Fulgoni, 2014).

However, online panels also have disadvantages which focus primarily on errors. Findings suggest that survey results from non-probability online panels are not representative (Baker, 2011). Furthermore, members of online panels are found to be heavy users of the internet which can lead to potential errors when comparing the results to the general population (Fulgoni, 2014). Panel effects that can also occur with online panels include participants becoming 'professional respondents' because of frequent participation and selection bias resulting in population representation problems (Dennis, 2001). When comparing response rates of online panels to telephone, online panels were found to have lower response rates (Baker, 2011). McDevitt and Small (2002) examined individuals in the same study, both online and via mail, and found that participation obtained from the online panel had a lower response rate (57%) as compared to a mail survey (70%), citing personal privacy, lifestyles, and/or patterns of computer usage as barriers to completion. Dennis (2001) concludes that if online panels are used appropriately and panel effects are taken into account during research design, the benefits of online panels can be realized. Since the focus of this study is on consumers who have purchased online; therefore, an online panel deems appropriate because it captures a behavior that is a boundary of this study.

Data Collection Procedures

The structured survey was prepared and available through Qualtrics, an online survey application, which collects responses and interfaces with Statistical Package for

the Social Sciences (SPSS). Since the survey is directed to participants who have online experience, utilizing Qualtrics will not be a disadvantage because of the existing technological knowledge (Paolacci et al. 2010). From a data analysis perspective, in addition, utilizing Qualtrics decreases the need for additional processing of the data by researchers, resulting in decreasing data entry errors (Malhotra, 2010). Development of the Internet has allowed researchers access to study participants that might otherwise be limited through restraints such as geographical boundaries, time boundaries, and cost boundaries. Researchers have pointed out that online surveys can be emailed to potential participants with less time and financial resources than mail surveys (Dillman, Smyth, & Christian, 2009). As the focus of this study relates to online behavior, it is therefore appropriate to utilize an online survey. However, the distribution of the survey presents challenges. That is, in an effort to protect consumers in the marketplace, the Federal Trade Commission (FTC) has developed and enforces requirements for companies and researchers who seek out potential consumers via email. Effective January 1, 2004, the CAN-SPAM (Controlling the Assault of Non-Solicited Pornography and Marketing Act) Act requires that all emails sent to consumers should not include any misleading information in the header, and should not contain deceptive subject lines. On the other hand, those emails should provide recipients an opt-out option and that commercial email be identified as advertisement (Federal Trade Commission, 2004). As such, additional updates to the Act have made it more difficult to reach potential participants who do not acknowledge their interest in receiving emails (Dillman et al., 2009). The increasing rules that are being implemented in an effort to protect consumers are restricting the ability to

reach study participants for research purposes. In studies that involved the online channel email or online questionnaires were utilized because the respondents were web users indicating a knowledge of the technology (Chiou et al., 2010). Therefore, by using an online survey instrument, respondents who are not familiar with the technology will not be included in the sample.

A two-step process related to data collection process was followed. A qualifying survey of two questions regarding age and their online shopping experience was made available on mturk for participants to complete. Of the responses, those that met the criteria (baby boomer and have made an online apparel purchase) were given access to complete the final survey (see Appendix A). All of the responses were recorded through Qualtrics in the SPSS format.

Statistical Analysis

The results of the pretest were analyzed and to determine the content validity of the questions. Once the data was captured in Qualtrics, it was reviewed for consistency and survey completion. Incomplete responses were not included in the final results.

Based on the way that Qualtrics interfaces with SPSS, there is no need for coding and transcribing of the raw data.

Data obtained in this study were entered into SPSS for statistical analysis.

Descriptive analysis (e.g., frequency, means, and modes) were performed on final data set via SPSS Statistics 21. Confirmatory factor analysis was performed on a construct that has multiple dimensions (i.e., perceived website quality). Items with a factor loading of at least .40 on a single factor were retained, whereas items that significantly cross-load on

other factors were eliminated to produce relatively pure indicators (Hair et al., 2010). Factors that met the above criteria were retained for the final data analysis. Cronbach's alpha was used to assess reliability of the construct. Cronbach's alpha values range from 0 to 1 and a value of greater than 0.6 indicates acceptable reliability (Hair et al., 2010; Malhotra, 2010). For the final analysis, the two-step approach was employed to establish measurement and structural model via LISREL 8.8 (Anderson & Gerbing, 1988; Joreskog & Sorbom, 1996).

First, confirmatory factor analysis (CFA) via LISREL 8.8 using maximum likelihood estimation was completed in the analysis and the sample covariance matrix was utilized as input prior to incorporating the structural restrictions (Joreskog & Sorbom, 1993). CFA was performed to determine how well the measured variables represent the construct and minimum factor loading of 0.5 was used as a cutoff (Hair et al., 2010; Malhotra, 2010). Confirmatory factor analysis (CFA) was used to define the individual constructs, confirming unidimensionality and to develop the measurement (Hair et al., 2010; Howell, 2010). Furthermore, results of CFA were employed to assess the psychometric properties of the measures, i.e., validity and reliability. Two types of validity were assessed in the current study; convergent and discriminant validity.

Convergent validity is defined as when the scale correlates positively with other measures of the same construct (Malhotra, 2010) and share a high proportion of variance in common (Hair et al., 2010). Convergent validity was assessed using the strength of the factor loadings (i.e., t-value) of each observed variable on its respective latent construct. In order to establish evidence of convergent validity, factor loadings of the observed

variables for the underlying latent constructs should be high and statistically significant (Bagozzi, Yi, & Phillips, 1991). Ideally, factor loadings should be higher than 0.7 (Malhotra, 2010). Discriminant validity is defined as a measure that does not correlate with other constructs from which it is supposed to differ (Malhotra, 2010) and the construct is truly distinct from other constructs (Hair et al., 2010). To examine discriminant validity among constructs, the average variance was calculated (Fornell & Larcker, 1981). The variance extracted test requires that the squared correlation between two constructs be smaller than the average variance extracted (AVE) for each construct. Composite reliability (CR) is defined as the total amount of true score variance in relation to the total score variance (Malhotra, 2010). Fornell and Larcker (1981) also state that composite reliability represent shared variance among a set of observed variables measuring an underlying construct. Composite reliability was assessed using CFA results. A composite reliability threshold of 0.7 or greater is recommended (Nunnally & Bernstein, 1994). However, composite reliability estimates between 0.6 and 0.7 are considered acceptable if the estimates of the model validity are good (Malhotra, 2010).

After confirming the measurement model, structural equation modeling (SEM) was utilized to examine the structure of the relationships between variables including multiple relationships and latent variables (Schumacker & Lomax, 2010). SEM was used to identify the causal relationships between dimensions of website quality (system quality, information quality, service quality) and overall perceived website quality, satisfaction, trust, and loyalty as measured in terms of word of mouth, share of wallet, and repatronage intention.

In evaluating whether the hypothesized relationships fit with the data, it is suggested that multiple indices are employed, including: chi-square (χ^2), root mean square error approximation (RMSEA), comparative fit index (CFI), and normed-fit index (NFI). The chi-square is a fundamental fit index for evaluation in SEM and measures differences between the observed and estimated covariance matrices. However, the chisquare tends to be discounted by the researchers because this statistic test is greatly impacted by sample size and the model complexity (Bearden, Sharma, & Teel, 1982; Bollen, 1989; Hair et al. 2010). The RMSEA is the difference between actual and predicted covariance. Unlike the chi-square statistics, RMSEA is adjusted for the degrees of freedom and sample size. In general, RMSEA values less and or equal to 0.08 indicate a reasonable fit (Malhotra, 2010). CFI includes degrees of freedom for model complexity but is negatively impacted by sample size. Generally, CFI values vary from 0 to 1 and CFI values of 0.90 or greater are considered a good fit (Malhotra, 2010). Last, NFI is a ratio of the difference in the chi-square value and the null model and values range between 0 and 1 with a value of 0.90 or higher indicates a good fit (Hair, et. al., 2010).

Summary

This chapter provides the research methodology utilized in this dissertation. The methods that were employed to achieve the objectives of the study and to test the hypotheses were presented. Instrument development, sample and data collection procedures, and statistical analysis were discussed.

CHAPTER IV

RESULTS

This chapter presents the results of statistical analyses that were employed to answer all proposed hypotheses addressed in Chapter II. This chapter begins with an overview of sample characteristics followed by descriptive statistics of all variables investigated in the study. Next, the results of the confirmatory factor analysis (CFA) that was employed for the purpose of validation and purification of constructs are presented, followed by the results of the analysis. Finally, the results of measurement and structural models are addressed. In addition, these statistical results are addressed along with the hypotheses proposed in Chapter II.

Sample Characteristics

The survey was made available in Mturk utilizing Qualtrics. Survey was comprised of two qualifying questions. The first question was pertaining to their recent online apparel purchase (i.e., "have you purchased apparel online in the last six months?") and the second question was related to their generational cohort (i.e., "what generational cohort do you belong to?"). There were a total of 1,096 Mturk participants who responded to the qualification survey. Of those, however, only 140 responses (12.8%) met these two criteria mentioned earlier (i.e., bought online apparel in the last six months and were born between 1946 and 1964, which represents the baby boomer cohort) and then were asked to participate in the final survey. According to Paolacci et al.

(2010), Mturk workers are "at least as representative of the U.S. population as traditional subject pools, with gender, race, age and education of Internet samples all matching the population more closely than internet samples in general" (p 414). In order to enhance the sample size, it was determined that additional responses were needed. As a result, a professional organization in the field of textiles and apparel (International Textile and Apparel Association) was utilized to reach potential responses. An email was sent to the member distribution list which included a link to the Qualtrics qualifying survey. In addition participants were also recruited through personal networking and provided a link to the Qualtrics qualifying survey. As such, we sent out an additional 126 qualifying survey to the professional organization and personal network.

Approximately fifteen percent (188 surveys) of the respondents met the qualifying questions (i.e. bought online apparel in the last six months and were born between 1946-1964 which represents the baby boomer cohort). A total sample of 188 surveys were collected, after removing incomplete surveys and validating participant age, 169 surveys were usable and included in the data set.

Table 3. Results of Qualification Survey

	Number of P	articipants	Percentage of	
Survey Distribution	Qualifying Survey	Final Survey	Participants Qualified	
Mturk Professional	1,096	140	12.8%	
Org/Networking	126	48	38.1%	
Total	1,222	188	15.4%	

		Frequency	Percentage
Purchased apparel online in			
the last 6 months	Yes	1057	86.5%
	No	165	13.5%
Age group	18-29	424	34.7%
	30-49	544	44.5%
	50-68	237	19.4%
	69 & older	17	1.4%

The demographic characteristics of the sample are summarized in Table 4.

Among the participants in the final sample, 73% were female and 23% were male. The participants were predominantly Caucasians (75%), followed by Black or African American (11%), Asian and Hispanic or Latino (6% for both groups), and others (2%). In order to validate the participants age given in the qualification survey, two additional questions (i.e., "year of birth" and "age") were included in the final survey to validate age after meeting the qualifying requirements. Such responses were used to validate the individuals' survey responses. Responses given in the final survey that were not consistent with the response in the qualification survey were not included in the final analysis. Results revealed that 83% of participants indicated their perceived age to be baby boomer (born between 1946-1964) and 15% of participants indicated their perceived age to be Generation X (born between 1965-1984). Approximately 56% were employed full-time, and almost 20% were retired. Approximately 50% reported an annual household income between USD 30,001 and USD 90,000.

Table 4. Participants' Demographic Characteristics

		Percentage
Gender	Male	27.3%
	Female	72.7%
Edenicites	African American	11 40/
Ethnicity	Asian American	11.4%
		5.4%
	Caucasian	75.3%
	Hispanic/Latino	5.4%
	Other	2.4%
Dargaiyad Aga	Millannial (1095, 1006)	1.8%
Perceived Age	Millennial (1985-1996)	
	Generation X (1965-1984) Baby Boomer (1946-	15.1%
	1964)	83.1%
	Silent Generation (before	
	1946)	0.0%
Employment Status	Employed full-time	55.8%
	Employed part-time	16.4%
	Not employed	9.1%
	Retired	18.8%
Annual Household		
Income	\$ 0 - \$ 30,000	18.5%
	\$ 30,001 - \$ 60,000	31.5%
	\$ 60,001 - \$ 90,000	19.1%
	\$ 90,001 - \$ 120,000	13.6%
	\$ 120,001 - \$ 150,000	5.6%
	\$ 150,001 - \$ 180,000	4.9%
	\$ 180,001 - \$ 210,00	4.3%
	Over \$ 210,000	2.5%

Participants' Online Behavior

Forty percent of the participants indicated that the major purpose of their website visit was to look for merchandise to purchase while twenty-one percent of participants indicated that they had gone to the website specifically to make a purchase. In addition, approximately forty percent accessed the website via a desktop computer, while forty-five percent accessed the website via a laptop. However, only four percent utilized a mobile phone to access the website. In terms of frequency of website visits in the last six months, almost 30% indicated that they visited the website 1-3 times and 26% indicated that they visited the website 4-6 times, while almost twenty two percent of participants visited the website more than twelve times. Furthermore, Figure 2 illustrates amount of money that participants spent on apparel online and in-store purchases in the last six months. Apparel purchased in the last six months that amounted to more than \$51 was purchased more often online (86.2%) than in-store (74.2%).

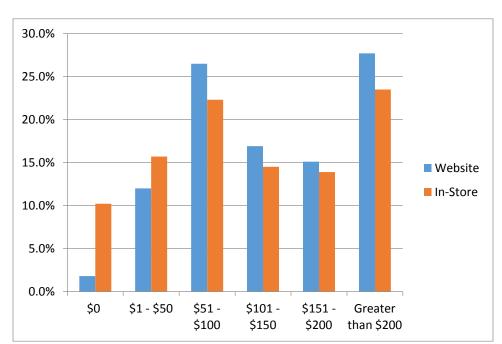


Figure 2. Dollars Spent on Apparel in the Last Six Months (In Percentages)

Responses obtained from the two groups of participants (mtruk and professional organization/networking) were analyzed to determine if there were any differences in their responses for each construct being studied. A series of independent sample t-test were performed. Results indicated that there were no significant differences between the two groups on means of the studied constructs (i.e., web appearance, interactivity, informativeness, security, fulfillment, responsiveness, overall perceived website quality, satisfaction, trust, word of mouth, share of wallet, and repatronage intentions).

Validation and Purification of Constructs

In order to validate the proposed scales, confirmatory factor analysis (CFA) via LISREL 8.8 using maximum likelihood estimation method was performed to validate the perceived website quality constructs being investigated in the current study. The

constructs included System Quality, Information Quality, and Service Quality, Overall Perceived Website Quality, Trust, Satisfaction, and Loyalty. CFA results were employed to define the individual constructs, confirm unidimensionality, and assess the psychometric properties of the measures, i.e., validity and reliability.

Website Quality

Table 5 shows scale items and descriptive statistics for Overall Perceived Website Quality. As proposed, the website quality construct consists of three major dimensions: system quality, information quality, and service quality. System quality consists of web appearance and interactivity. Three items were used to assess web appearance while eleven items were used to assess interactivity. For information quality, the scale consists of informativeness and security. Five items were used to assess informativeness while five items were used to assess security. Service quality consists of fulfillment/reliability and responsiveness. Five items were used to assess fulfillment/reliability while eight items were used to assess responsiveness.

11.

Table 5. Descriptive Statistics and CFA Results for the Original 37-item 3-construct Model of Overall Perceived Website Quality

Items' Abbreviation	Items' Description		
		Means (S.D.)	Factor Loadings (t-values)
Construct	Variable		
System Quality:	Web Appearance (3 items)		
WA1	The website looks organized.	5.25 (.71)	0.81*** (7.29)
WA2	The website is visually appealing. The display pages within the website are easy	5.14 (.75)	0.81*** (7.34)
WA3	to read.	5.26 (.73)	0.84*** (6.71)
	Composite Reliability Average Variance Extracted	0.86 0.68	
System Quality:	Interactivity (11 items)		
I1	The website looks secured for carrying out transactions (e.g. uses SSL, digital certificates, etc.).	5.23 (.83)	0.69*** (8.70)
I2	The website looks easy to navigate.	5.14 (.78)	0.77*** (8.32)
12	The website has adequate or effective search	3.14 (.70)	0.77 (0.32)
I3			
	functions.	5.04 (.93)	0.84*** (7.68)
I4	functions. The website is always up and available.	5.04 (.93) 5.23 (.90)	0.84*** (7.68) 0.78*** (8.24)
I4 I5		` ′	` '

I7	The web pages load fast in the website.	5.08 (.83)	0.52*** (9.08)
	The website is easy to access (i.e. has a		
I8	reflective and widely registered name).	5.31 (.77)	0.65*** (8.84)
I9	It is quick and easy to complete a transaction.	5.21 (.89)	0.61*** (8.94)
	The website is a preferable alternative to		
I10	calling customer service or sales.	5.25 (.91)	0.41*** (9.21)
I11	This site launches and runs right away.	5.32 (.70)	0.68*** (8.76)
	Composite Reliability	0.87	
	Average Variance Extracted	0.40	
Information	Quality: Informativeness (5 items)		
In1	The webiste is a good source of product		
	information.	5.22 (.83)	0.70*** (8.04)
In2	The content of the website is concise.	5.16 (.77)	0.76*** (7.52)
In3	The content of the website is accurate.	5.20 (.74)	0.83*** (6.40)
	The website allows me to interact with it to		
In4	receive tailored information.	4.60 (1.04)	0.37*** (9.14)
	The website adequately meets my information		
In5	needs.	5.14 (.82)	0.74*** (7.70)
	Composite Reliability	0.82	
	Average Variance Extracted	0.49	
Information	Quality: Security (5 items)		
	Quality: Security (5 items) My privacy is protected at this site.	5.02 (.86)	0.79*** (7 90)
Information S1 S2	Quality: Security (5 items) My privacy is protected at this site. My transactions are safe with this website.	5.02 (.86) 5.07 (.86)	0.79*** (7.90) 0.85*** (6.99)

	The website keeps my personal information		
S4	safe.	4.99 (.83)	0.80*** (7.78)
S5	The website protects information about my credit card.	5.02 (.92)	0.69*** (8.57)
	Composite Reliability	0.90	
	Average Variance Extracted	0.64	
Service Qua	lity: Fulfillment/Reliability (5 items)		
F1	The product that came was represented		
	accurately by the website.	5.01 (1.26)	0.90*** (7.03)
F2	I got what I ordered from this site.	5.14 (1.23)	0.95*** (4.73)
	The product is delivered by the time promised		
F3	by the company.	5.09 (1.28)	0.91*** (6.45)
	The company makes items available for		
F4	delivery within a suitable time frame.	5.26 (.91)	0.50*** (9.19)
F5	The website is truthful about its offerings.	5.22 (.86)	0.48*** (9.20)
	Composite Reliability	0.88	
	Average Variance Extracted	0.60	
Service Qua	lity: Responsiveness (8 items)		
R1	It is easy to find contact information on the		
	website (e.g., e-mail addresses, phone numbers,	4.00 (1.14)	0.60*** (0.41)
	etc.).	4.92 (1.14)	0.69*** (8.41)
	It is easy to find information related to		
D.0	customers' policies on the website (e.g., privacy	4.00 (.00)	0 (Tababah (0 40)
R2	and dispute details).	4.90 (.99)	0.67*** (8.49)

R3	It is easy to find information related to customer service on the website.	4.99 (1.00)	0.63*** (8.69)
R4	The company is willing and ready to respond to customer service needs.	4.79 (1.30)	0.81*** (7.41)
R5	When I have a problem the company shows a sincere interest in solving it.	4.51 (1.59)	0.78*** (7.72)
R6	Inquiries are answered promptly.	4.46 (1.57)	0.77*** (7.84)
R7 R8	The company provides me with convenient options for returning items. The website handles product returns well.	4.94 (1.23) 4.63 (1.46)	0.63*** (8.69) 0.67*** (8.53)
	Composite Reliability	0.89	
	Average Variance Extracted	0.50	
	Model Fit Indices		
	χ^2	2172	.407***
	df		614
	χ^2 /df		3.54
	RMSEA	(0.12
	CFI	(0.88
	NFI	(0.84
	TLI		0.87

Note: * p < .05; *** p < .001

The original thirty-seven items of website quality were consistent with the threefactor structure of website quality proposed by DeLone and McLean (2003) (see Table 5). The CFA results revealed standardized factor loadings that ranged from 0.10 (I6) to 0.95 (F2) and all were significant. Furthermore, the χ^2 statistic resulting from the threefactor structure model of website quality was 2,172.407 with 614 degrees of freedom at p<.001. The chi-square statistic was significant at the 0.001 level; however, this measurement has been shown to be overly sensitive to sample size (Bentler & Bonett, 1980). Thus, additional indices were employed to assess the model fit. The normed chisquare (χ^2/df) was 3.54, the root mean square of error approximation (RMSEA) was 0.12, the comparative fit index (CFI) was 0.88, the normed fit index (NFI) was 0.84 the Tucker-Lewis fit index (TLI) was 0.87, and the standardized RMR (SRMR) was 0.11. The values of CFI, NFI, and TLI ranged from 0.84 - 0.88, suggesting a somewhat satisfactory fit (Schumacker & Lomax, 2010). In addition, the value of RMSEA is above the minimum value of 0.05 to 0.08 suggesting a less than satisfactory fit (Hair et al., 2010). Finally, the value of SRMR was also above the 0.10 value proposed by Hair et al. (2010). In general, these fit indexes revealed a less than satisfactory fit.

Scale Purification

Purification of the 37-item, 3-factor of website quality model was performed. Items with factor loadings less than 0.5 and items that cross-loaded on one or more factor were removed as recommended by Hair et al. (2010) and Malhotra (2010). As a result, four items (I6, I10, In4, and F5) were removed due to low factor loading and four items (I9, I11, F2, and R3) were removed for cross-loading on more than one dimension. Thus,

a total of eight items were removed, resulting in the revised 29-item, 3-factor structure model of website quality.

The twenty nine items of website quality were again subjected to further analysis. The CFA results revealed that the revised measurement model of 29-item, 3-factor structure of website quality showed an improved fit over the original measurement model ($\chi^2 = 1121.375$, df = 362, p<.001, χ^2 /df = 3.10, RMSEA = 0.109, CFI = 0.91, NFI = 0.88, TLI = 0.90, and SRMR = 0.08) (see Table 6). While the chi-square statistic was significant at the 0.001 level; other fit indices indicated values were acceptable. In general, these fit indexes revealed a satisfactory fit. In addition, all factor loadings were significant at p<.001 and exceeded 0.50. In addition, the reliability and average variance extracted of all dimensions of website quality improved with the purification of the scales.

119

Table 6. CFA Results for the Revised 29-item 3-construct Model of Overall Perceived Website Quality

Items' Abbreviation	Items' Description		
		Factor Loadings	(t-values)
Construct	Variable		
System Quality: '	Web Appearance (3 items)		
WA1	The website looks organized.	0.82***	(7.16)
WA2	The website is visually appealing. The display pages within the website are easy	0.81***	(7.26)
WA3	to read.	0.83***	(6.98)
	Composito Poliobility	0.86	
	Composite Reliability	0.67	
	Average Variance Extracted	0.0 7	
System Quality: 1	Interactivity (7 items)		
	The website looks secured for carrying out		
	transactions (e.g. uses SSL, digital certificates,		
I1	transactions (e.g. uses SSL, digital certificates, etc.).	0.71***	(8.53)
I1 I2		0.71*** 0.79***	(8.53) (8.04)
	etc.).		` '
	etc.). The website looks easy to navigate.		` '
12	etc.). The website looks easy to navigate. The website has adequate or effective search	0.79***	(8.04)
I2 I3	etc.). The website looks easy to navigate. The website has adequate or effective search functions.	0.79*** 0.86***	(8.04) (7.03)
I2 I3 I4	etc.). The website looks easy to navigate. The website has adequate or effective search functions. The website is always up and available.	0.79*** 0.86*** 0.78***	(8.04) (7.03) (8.07)

Composite Reliability 0.87 Average Variance Extracted 0.49

Information	n Quality: Informativeness (4 items)		
	The website is a good source of product		
In1	information.	0.70***	(8.01)
In2	The content of the website is concise.	0.77***	(7.30)
In3	The content of the website is accurate. The website adequately meets my information	0.83***	(6.17)
In5	needs.	0.73***	(7.75)
	Composite Reliability	0.84	
	Average Variance Extracted	0.57	
Information	n Quality: Security (5 items)		
S 1	My privacy is protected at this site.	0.79***	(7.90)
S2	My transactions are safe with this website.	0.85***	(6.96)
S3	The website has adequate security features. The website keeps my personal information	0.87***	(6.63)
S4	safe. The website protects information about my	0.80***	(7.78)
S5	credit card.	0.69***	(8.56)
	Composite Reliability	0.90	
	I		

Service Quality: Fulfillment/Reliability (3 items)

'n	
È	

F1	The product that came was represented accurately by the website.	0.85***	(4.94)
F3	The product is delivered by the time promised by the company.	0.92**	(2.51)
F4	The company makes items available for delivery within a suitable time frame.	0.55***	(8.87)
	Composite Reliability	0.83	
	Average Variance Extracted	0.63	
Service Qu	ality: Responsiveness (7 items)		
R1	It is easy to find contact information on the website (e.g., e-mail addresses, phone numbers, etc.).	0.61***	(8.76)
R2	It is easy to find information related to customers' policies on the website (e.g., privacy and dispute details).	0.60***	(8.77)
R4	The company is willing and ready to respond to customer service needs.	0.80***	(7.52)
R5	When I have a problem the company shows a sincere interest in solving it.	0.84***	(6.95)
R6	Inquiries are answered promptly.	0.82***	(7.14)
R7	The company provides me with convenient options for returning items.	0.64***	(8.66)
R8	The website handles product returns well.	0.68***	(8.49)
	Composite Reliability	0.88	

Average Variance Extracted	0.52
M. LIEST I	
Model Fit Indices	
χ^2	1121.375***
df	362
χ^2/df	3.10
RMSEA	0.109
CFI	0.91
NFI	0.88
TLI	0.90
SRMR	0.083

Note: * p < .05; *** p < .001

Measurement and Structural Models

Measurement Model

The two-step approach suggested by Anderson and Gerbing (1988) was employed to establish measurement and structural models. Confirmatory factor analysis (CFA) via LISREL 8.8 was conducted to estimate a measurement model using maximum likelihood estimation in the analysis and the sample covariance matrix as input prior to incorporating the structural restrictions (Joreskog & Sorbom, 1996).

The initial CFA measurement model consisted of 52-item 12-constructs. CFA results revealed that chi-square statistic was statistically significant, $\chi^2 = 3452.272$ with df of 1208, p<.001, suggesting a lack of satisfactory model fit (i.e., the hypothesized mode was incongruent with observed data (see Table 7). However, chi-square test is likely to be discounted by researchers because this statistical test is known to be overly sensitive to sample size (Bentler & Bonett, 1980) and model complexities (Bollen, 1989). Thus, additional indices were employed to assess the model fit, including the normed chi-square (χ^2 /df), the root mean square of error approximation (RMSEA), the comparative fit index (CFI), the normed fit index (NFI), the Tucker-Lewis fit index (TFI), and the standardized RMR (SRMR). Results revealed the χ^2 /df of 2.86, RMSEA of 0.10, CFI of 0.91, NFI of 0.87, TLI of 0.90, and SRMR of 0.09. The values of CFI, NFI, and TLI ranged from 0.87 – 0.91 suggesting a somewhat satisfactory fit (Schumacker & Lomax, 2010). In addition, the value of RMSEA was above the minimum value of 0.05 to 0.08, suggesting a less than satisfactory fit (Hair et al., 2010). Finally, the value of SRMR was

below the 0.10 value recommended by Hair et al. (2010). Therefore, it is concluded that the CFA model fit data reasonably based on the latter fit indices considered in the study.

Table 7. Initial Measurement Model

Construct/l	Indicators	Means (S.D.)	Factor Loadings (t-values)
System Qu	ality: Web Appearance ξ ₁ (3 items)		
\mathbf{X}_1	The website looks organized.	5.25 (.71)	0.81*** (7.50)
$egin{array}{c} X_2 \ X_3 \end{array}$	The website is visually appealing. The display pages within the website are easy to read.	5.14 (.75) 5.26 (.73)	0.81*** (7.55) 0.84*** (6.95)
	Composite Reliability (CR) Average Variance Extracted (AVE)	0.86 0.67	
System Qu	ality: Interactivity ξ_2 (7 items)		
X_4	The website looks secured for carrying out transactions (e.g. uses SSL, digital certificates, etc.).	5.23 (.83)	0.70*** (8.63)
X_5	The website looks easy to navigate.	5.14 (.78)	0.79*** (8.13)
X_6	The website has adequate or effective search functions.	5.04 (.93)	0.86*** (7.07)
X_7	The website is always up and available.	5.23 (.90)	0.79*** (8.12)
X_8	The website has valid links (hyperlinks).	4.91 (1.05)	0.57*** (9.00)
X_9	The web pages load fast in the website.	5.08 (.83)	0.50*** (9.11)
X_{10}	The website is easy to access (i.e. has a reflective and widely registered name).	5.31 (.77)	0.60*** (8.92)
	Composite Reliability (CR) Average Variance Extracted (AVE)	0.87 0.49	
Information	n Quality: Informativeness ξ ₃ (4 items)		
X_{11}	The website is a good source of product information.	5.22 (.83)	0.71*** (8.13)

X_{12}	The content of the website is concise.	5.16 (.77)	0.76*** (7.64)
X_{13}	The content of the website is accurate.	5.20 (.74)	0.81*** (6.91)
X_{14}	The website adequately meets my information needs.	5.14 (.82)	0.75*** (7.77)
	Composite Reliability (CR) Average Variance Extracted (AVE)	0.84 0.57	
Informati	ion Quality: Security ξ ₄ (5 items)		
X_{15}	My privacy is protected at this site.	5.02 (.86)	0.79***(8.00)
$X_{16} X_{17}$	My transactions are safe with this website. The website has adequate security	5.07 (.86)	0.85*** (7.10)
T.7	features.	5.06 (.87)	0.87*** (6.65)
X_{18}	The website keeps my personal information safe.	4.99 (.83)	0.80*** (7.91)
X_{19}	The website protects information about my credit card.	5.02 (.92)	0.68*** (8.63)
		0.00	
	Composite Reliability (CR)	0.90	
	Average Variance Extracted (AVE)	0.90 0.64	
Service (• • • • • • • • • • • • • • • • • • • •		
Service (X ₂₀	Average Variance Extracted (AVE)		
	Average Variance Extracted (AVE) Quality: Fulfillment/Reliability ξ_5 (3 items) The product that came was represented	0.64	
X_{20}	Average Variance Extracted (AVE) Quality: Fulfillment/Reliability ξ_5 (3 items) The product that came was represented accurately by the website. The product is delivered by the time	5.01 (1.26)	0.85***(5.08)
X_{20} X_{21}	Average Variance Extracted (AVE) Quality: Fulfillment/Reliability ξ ₅ (3 items) The product that came was represented accurately by the website. The product is delivered by the time promised by the company. The company makes items available for	5.01 (1.26) 5.09 (1.28)	0.85***(5.08) 0.92***(2.81) 0.55***(8.88)

X_{24}			
2 7	It is easy to find information related to customers' policies on the website (e.g.,		
	privacy and dispute details).	4.90 (.99)	0.61*** (8.75)
X_{25}	The company is willing and ready to		
3 7	respond to customer service needs.	4.79 (1.30)	0.81*** (7.36)
X_{26}	When I have a problem the company	4.51.71.50	0.00*** (7.00)
X_{27}	shows a sincere interest in solving it.	4.51 (1.59)	0.82*** (7.26)
X_{27} X_{28}	Inquiries are answered promptly.	4.46 (1.57)	0.81*** (7.45)
Λ_{28}	The company provides me with convenient options for returning items.	4.94 (1.23)	0.65*** (8.63)
X_{29}	The website handles product returns well.	4.63 (1.46)	0.68*** (8.47)
	The weeste handles product returns well.	1.03 (1.70)	0.00 (0.47)
	Composite Reliability (CR)	0.88	
	Average Variance Extracted (AVE)	0.52	
	received Website Quality η ₁ (5 items)		
\mathbf{Y}_1	Overall, the website worked very well technically.	5.31 (.88)	0.79*** (8.26)
\mathbf{Y}_2	Visually, the website resembled other sites		ate a te
3 7	I think highly of.	5.02 (.89)	0.67*** (8.80)
\mathbf{Y}_3	The website was simple to navigate.	5.22 (.71)	0.83*** (7.83)
Y_4	On the website, it was easy to find the	5 17 (70)	0.87*** (7.14)
Y_5	information I wanted.	5.17 (.79)	0.87 (7.14) 0.84*** (7.71)
- 5	The website is of high quality.	5.24 (.78)	0.04 (7.71)
	Composite Reliability (CR)	0.90	
	Average Variance Extracted (AVE)	0.65	
Satisfactio	n η_2 (2 items)		
	I am satisfied with my decision to visit the		0.77***
Y_6	website.	5.24 (.81)	0.77*** (7.18)
Y_7	I think I made the right decision by visiting the website.	5.28 (.75)	0.95*** (1.59)
17	visiting the website.	3.20 (.13)	0.75 (1.59)
	Composite Reliability (CR)	0.86	
	Average Variance Extracted (AVE)	0.75	

Trust η_3 ((5 items)		
Y ₈ Y ₉	I feel good about how things go when I do purchase or browse on this website. I always feel confident that I can rely on	5.18 (.98)	0.85*** (7.07)
	this website to do business when I interact with them.	5.15 (.89)	0.88*** (6.52)
Y_{10}	In general, I feel that this website is competent at serving its customers.	5.18 (.85)	0.82*** (7.68)
Y_{11}	I feel that most internet vendors are good at what they do.	4.51 (1.04)	0.16*** (9.33)
Y ₁₂	I feel assured that legal and technological structures adequately protect me from problems on this website.	4.95 (.85)	0.53*** (9.04)
	Composite Reliability (CR) Average Variance Extracted (AVE)	0.81 0.49	
	WOM η ₄ (3 items)		
\mathbf{Y}_{13}	I am likely to encourage friends and others to do business with this site.	5.01 (.98)	0.77*** (7.83)
Y_{14}	I would say positive things about this website to other people.	5.06 (.85)	0.89*** (5.23)
Y ₁₅	I always refer my acquaintances to this website.	4.45 (1.17)	0.66*** (8.55)
	Composite Reliability (CR) Average Variance Extracted (AVE)	0.82 0.61	
Loyalty:	Share of Wallet η ₅ (3 items)		
Y ₁₆	How much did you spend at the website in the past 6 months?	4.12 (1.45)	0.54*** (8.99)
Y ₁₇	Out of every \$500 you spend online, how many dollars do you spend at this website?	3.87 (1.53)	0.83*** (7.22)
Y_{18}	Out of every 10 purchases you make online, how many purchases are made at	, , ,	
	this website?	2.94 (1.28)	0.89*** (5.52)
	Composite Reliability (CR)	0.81	

Loyalty: 1	Repatronage Intention η_6 (5 items)		
Y ₁₉	I am likely to purchase from apparel (clothing) websites within the next six months.	5.10 (.92)	0.62*** (8.66)
Y_{20}	I intend to purchase through this website	3.10 (.72)	0.02 (0.00)
	in the near future.	4.96 (.92)	0.72*** (7.63)
Y_{21}	It is likely that I will purchase through this site in the near future.	4.97 (.89)	0.29*** (9.39)
Y_{22}	I am likely to revisit this site in the near future.	5.12 (.91)	0.15*** (9.37)
Y ₂₃	I consider myself to be a loyal patron of this website.	4.96 (.97)	0.17*** (9.37)
	Composite Reliability (CR)	0.50)
	Average Variance Extracted (AVE)	0.21	
	Model Fit Indices		
	χ^2	3452.	272***
	df	1208 2.86 0.103 0.91 0.87	
	χ^2 /df		
	RMSEA		
	CFI		
	NFI		
	1111		
	TLI	0	.90

Note: * p < .05; *** p < .001

Purification of the 52-item, 12-construct model was completed utilizing certain criteria. That is, items with minimum factor loading of 0.5 and items that cross-loaded on one or more factor were removed as recommended by Hair et al. (2010) and Malhotra (2010). As a result, four items $(Y_{11}, Y_{21}, Y_{22}, \text{ and } Y_{23})$ were removed due to low factor loading and nine items $(X_9, X_{10}, X_{11}, X_{15}, Y_7, Y_{12}, Y_{15}, Y_{16}, \text{ and } Y_{20})$ were removed due

to cross-loading on more than one factor. Thus, a total of thirteen items were removed, resulting in the revised 39-item, 12-construct measurement model. Reducing the number of items was necessary to ensure that the strength of each factor was pure and that cross-loading was not occurring so that the results would be reliable and valid.

The thirty-nine item 12-construct measurement model was again subjected to further analysis. The CFA results revealed that the revised measurement model of 39-items, 12-constructs showed an improved fit over the original measurement model (χ^2 = 1761.90, df = 713, p<.001, χ^2 /df = 2.47, RMSEA = 0.09, CFI = 0.94, NFI = 0.90, TLI = 0.93, and SRMR = 0.07) (see Table 8). The chi-square statistic was also significant at the 0.001 level; however, as mentioned previously this measurement has been shown to be overly sensitive to sample size (Bentler & Bonett, 1980) and model complexities (Bollen, 1989). Thus, additional indices were employed to assess the model fit. The values of CFI, NFI, and TLI ranged from 0.90 – 0.94, suggesting a satisfactory fit (Schumacker & Lomax, 2010). In addition, the value of RMSEA is above the minimum value of 0.05 to 0.08 suggesting a less than satisfactory fit (Hair et al., 2010). Finally, the value of SRMR was below the 0.10 value proposed by Hair et al. (2010). In general, these fit indexes revealed a satisfactory fit. All factor loadings were significant at p<.001 and exceeded 0.50.

In addition, based on CFA results, the revised CFA measurement model revealed an improvement of CR and AVE over the initial measurement model. That is, CR ranged from 0.81 (loyalty: word of mouth) to 0.90 (overall perceived website quality). AVE ranged from 0.52 (service quality: responsiveness) to 0.77 (loyalty: share of wallet).

However, the values of CR and AVE of the satisfaction and the repatronage intention constructs were not reported due to the single-item scale.

Table 8. Revised Measurement Model

Construc	et/Indicators	Factor Loadings	(t-values)
System (Quality: Web Appearance ξ ₁ (3 items)		
X_1	The website looks organized.	0.82^{***}	(7.17)
X_2	The website is visually appealing. The display pages within the website are easy	0.81***	(7.22)
X_3	to read.	0.83***	(6.97)
	Composite Reliability (CR) Average Variance Extracted (AVE)	0.86 0.67	
System (Quality: Interactivity ξ_2 (5 items)		
X_4	The website looks secured for carrying out transactions (e.g. uses SSL, digital certificates,	***	
	etc.).	0.71***	(8.47)
$egin{array}{c} X_5 \ X_6 \end{array}$	The website looks easy to navigate.	0.82***	(7.61)
Λ_6	The website has adequate or effective search functions.	0.86***	(6.79)
X_7	The website is always up and available.	0.79^{***}	(7.88)
X_8	The website has valid links (hyperlinks).	0.58***	(8.93)
	Composite Reliability (CR)	0.87	
	Average Variance Extracted (AVE)	0.58	
Informat	ion Quality: Informativeness ξ ₃ (3 items)		
X_{12}	The content of the website is concise.	0.77^{***}	(7.28)
$egin{array}{c} X_{13} \ X_{14} \end{array}$	The content of the website is accurate. The website adequately meets my information	0.83***	(6.33)
	needs.	0.75***	(7.52)

	Composite Reliability (CR) Average Variance Extracted (AVE)	0.83 0.61	
Informatio	on Quality: Security ξ ₄ (4 items)		
X_{16}	My transactions are safe with this website.	0.87^{***}	(6.17)
$\begin{matrix} X_{17} \\ X_{18} \end{matrix}$	The website has adequate security features. The website keeps my personal information	0.88***	(6.06)
V	safe.	0.77***	(7.93)
X_{19}	The website protects information about my credit card.	0.69***	(8.50)
	Composite Reliability (CR)	0.88	
	Average Variance Extracted (AVE)	0.65	
Service Qu	uality: Fulfillment/Reliability ξ_5 (3 items)		
X_{20}	The product that came was represented accurately by the website.	0.86***	(4.82)
X_{21}	The product is delivered by the time promised by the company.	0.91***	(3.27)
X_{22}	The company makes items available for delivery within a suitable time frame.	0.54***	(8.88)
	Composite Reliability (CR) Average Variance Extracted (AVE)	0.82 0.62	
Service Qu	uality: Responsiveness ξ_6 (7 items)		
X_{23}	It is easy to find contact information on the website (e.g., e-mail addresses, phone numbers, etc.).	0.61***	(8.75)
X_{24}	It is easy to find information related to customers' policies on the website (e.g., privacy and dispute details).	0.60***	(8.78)
X_{25}	The company is willing and ready to respond to customer service needs.	0.81***	(7.39)
X_{26}	When I have a problem the company shows a sincere interest in solving it.	0.83***	(7.18)
X_{27}	Inquiries are answered promptly.	0.82***	(7.29)

X_{28} X_{29}	The company provides me with convenient options for returning items. The website handles product returns well.	0.64*** 0.68***	(8.66) (8.50)		
	Composite Reliability (CR) Average Variance Extracted (AVE)	0.88 0.52			
Overall F	Perceived Website Quality η ₁ (5 items)				
\mathbf{Y}_1	Overall, the website worked very well technically.	0.78***	(8.27)		
Y_2	Visually, the website resembled other sites I think highly of.	0.67***	(8.79)		
Y_3	The website was simple to navigate.	0.83***	(7.80)		
Y_4	On the website, it was easy to find the information I wanted.	0.88***	(7.03)		
Y_5	The website is of high quality.	0.84***	(7.63)		
	Composite Reliability (CR) Average Variance Extracted (AVE)	0.90 0.65			
Satisfacti	ion η_2 (1 item)				
Y_6	I am satisfied with my decision to visit the website.	0.90***			
Trust η ₃	(3 items)				
Y_8 Y_9	I feel good about how things go when I do purchase or browse on this website. I always feel confident that I can rely on this	0.87***	(6.52)		
19	website to do business when I interact with them.	0.89***	(5.93)		
Y_{10}	In general, I feel that this website is competent at serving its customers.	0.81***	(7.60)		
	Composite Reliability (CR) Average Variance Extracted (AVE)	0.89 0.73			

Loyalty:	WOM η ₄ (2 items)					
\mathbf{Y}_{13}	I am likely to encourage friends and others to do business with this site.	0.77***	(7.60)			
Y_{14}	I would say positive things about this website to other people.	0.87***	(5.07)			
	Composite Reliability (CR) Average Variance Extracted (AVE)	0.81 0.67				
Loyalty:	Share of Wallet η ₅ (2 items)					
Y ₁₇	Out of every \$500 you spend online, how many dollars do you spend at this website?	0.82***	(7.27)			
Y_{18}	Out of every 10 purchases you make online, how many purchases are made at this website?	0.93***	(3.62)			
	Composite Reliability (CR) Average Variance Extracted (AVE)	0.87 0.77				
Loyalty: 1	Repatronage Intention η_6 (1 item)					
Y ₁₉	I am likely to purchase from apparel (clothing) websites within the next six months.	· · ·				
	Model Fit Indices					
	χ^2	1761.90***				
	Df	713				
	χ^2/df	2.47				
	RMSEA	0.09				
	CFI NFI	0.94 0.90				
		0.90	0.90			
	TLI					

Note: * p < .05; *** p < .001

Assessment of Validity and Reliability

Results of CFA of the revised model were employed to assess the psychometric properties of the measures, i.e., validity and reliability. Table 8 showed that factor loadings of the indicators for the underlying constructs were all significant at the 0.001 level and completely standardized factor loadings were high, suggesting that convergent validity was established (Bagozzi et al., 1991). To examine discriminate validity, we employed the confidence interval test (Anderson & Gerbing, 1988). The confidence interval test requires that the correlation between the two latent constructs, plus or minus two times the standard of errors, does not include the value of 1.0. The highest correlation coefficient was between system quality: web appearance and system quality: interactivity which marginally established discriminant validity $.883 \pm 2(.078) = .727$ to 1.04, overall perceived website quality and information quality: informativeness was the next highest $.805 \pm 2(.075) = .66$ to .96, establishing discriminant validity. Results revealed that these conditions were met. Therefore, the constructs being investigated in the study were distinct from each other, confirming discriminant validity.

Composite reliability was assessed using CFA results. Fornell and Larcker (1981) also stated that composite reliability represents shared variance among a set of observed variables measuring an underlying construct. A composite reliability threshold of 0.7 or greater is recommended (Nunnally & Bernstein, 1994). However, composite reliability estimates at the minimum of 0.60 may be considered acceptable if the estimates of the model validity are good (Malhotra, 2010). Table 8 shows that composite reliability is

greater than 0.70 for all constructs, therefore, indicating reliable scales employed in the study.

Table 9. Correlation Matrix for all Latent Constructs

	WA	I	In	S	F	R	OWQ	SA	T	WOM	SW	RI
WA	1.000											
I	0.883**	1.000										
In	0.592**	0.587**	1.000									
S	0.457**	0.516**	0.559**	1.000								
F	0.328**	0.378**	0.379**	0.436**	1.000							
R	0.324**	0.396**	0.408**	0.400**	0.419**	1.000						
OWQ	0.647**	0.660**	0.805**	0.565**	0.331**	0.477**	1.000					
SA	0.363**	0.321**	0.583**	0.461**	0.235**	0.195*	0.549**	1.000				
T	0.411**	0.498**	0.579**	0.393**	0.462**	0.453**	0.706**	0.534**	1.000			
WOM	0.418**	0.498**	0.689**	0.635**	0.402**	0.422**	0.778**	0.671**	0.774**	1.000		
SW	0.352	0.432	0.392	0.571	0.342	0.403**	0.452	0.528	0.504	0.649	1.000	
RI	0.273**	0.307**	0.218**	0.299**	0.095**	0.119**	0.328**	0.320**	0.458**	0.427**	0.789	1.000

Note: WA = Web Appearance; I = Interactivity; In = Informativeness; S = Security; F = Fulfillment; R = Responsiveness; OWQ = Overall Perceived Website Quality; SA = Satisfaction; T = Trust; WOM = Word of Mouth; SW = Share of Wallet; and RI= Repatronage Intentions

Structural Model

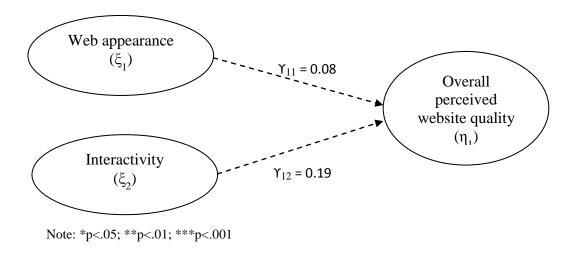
After the measurement model was confirmed, structural equation modeling was next performed to test all hypothesized relationships. The model fit statistics revealed χ^2 = 1766.33, df = 674, p<.001, χ^2 /df = 2.62, RMSEA = 0.09, CFI = 0.92, NFI = 0.89, TLI = 0.91, and SRMR = 0.08, suggesting that the hypothesized structural relationships fit the data satisfactorily.

Test of Hypotheses

Hypothesis 1: The Relationship between System Quality Dimension of Website Quality and Overall Perceived Website Quality

H1 proposed that overall perceived website quality would be influenced by a) web appearance and b) interactivity dimensions of system quality. Results showed that neither of the system quality dimensions as related to web appearance and interactivity significantly affected overall perceived website quality (see Figure 3). That is, web appearance did not influence overall perceived website quality ($\gamma_{11} = 0.08$, t-value = 0.52, p > 0.05). Likewise, interactivity did not influence overall perceived website quality ($\gamma_{12} = 0.19$, t-value = 1.06, p > 0.05). Thus, H1 was not supported.

Figure 3. The Relationship between System Quality Dimension of Website Quality and Overall Perceived Website Quality.

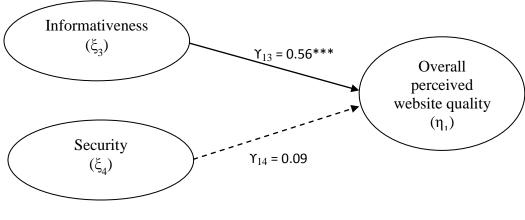


Hypothesis 2: The Relationship between Information Quality Dimension of Website

Quality and Overall Perceived Website Quality.

H2 proposed that overall perceived website quality would be influenced by a) informativeness and b) security dimensions of the information quality. Results showed that while informativeness of the information quality dimension significantly affected overall perceived website quality, security did not significantly affect overall perceived website quality (see Figure 4). That is, informativeness did positively influence overall perceived website quality ($\gamma_{13} = 0.56$, t-value = 5.88, p < 0.001). In addition, security did not positively influence overall perceived website quality ($\gamma_{14} = 0.09$, t-value = 1.46, p > 0.05). Thus, H2 was partially supported.

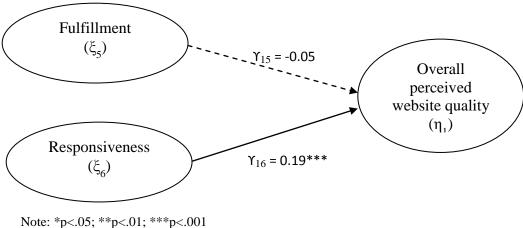
Figure 4. The Relationship between Information Quality Dimension of Website Quality and Overall Perceived Website Quality.



Hypothesis 3: The Relationship between Service Quality Dimension of Website Quality and Overall Perceived Website Quality.

H3 suggested that overall perceived website quality would be influenced by a) fulfillment and b) responsiveness dimensions of the service quality. Results showed that while responsiveness of the service quality dimension significantly affected overall perceived website quality, the dimension of fulfillment did not significantly affect overall perceived website quality (see Figure 5). That is, while responsiveness did positively influence overall perceived website quality ($\gamma_{16} = 0.19$, t-value = 2.23, p < 0.001), fulfillment did not positively influence overall perceived website quality ($\gamma_{15} = -0.05$, t-value = -0.81, p > 0.05). Thus, H3 was also partially supported.

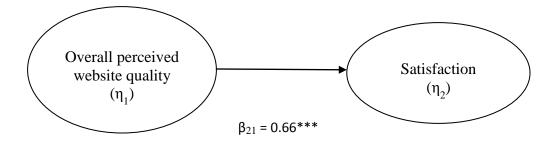
Figure 5. The Relationship between Service Quality Dimensions of Website Quality and Overall Perceived Website Quality.



Hypothesis 4: The Relationship between Overall Perceived Website Quality and Consumer Satisfaction.

H4 proposed that consumer satisfaction would be influenced by overall perceived website quality. Results showed that overall perceived website quality significantly affected satisfaction (see Figure 6). That is, overall perceived website quality did positively influence satisfaction (β_{21} = 0.66, t-value = 7.05, p < 0.001) supporting H4.

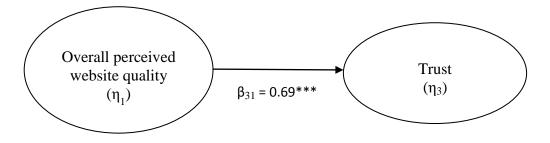
Figure 6. The Relationship between Overall Perceived Website Quality and Consumer Satisfaction.



Hypothesis 5: The Relationship between Overall Perceived Website Quality and Consumer Trust.

H5 proposed that consumer trust would be influenced by overall perceived website quality. Results showed that overall perceived website quality significantly affected trust (see Figure 7). That is, overall perceived website quality did positively influence trust ($\beta_{31} = 0.69$, t-value = 6.85, p < 0.001). Thus H5 was also supported.

Figure 7. The Relationship between Overall Perceived Website Quality and Consumer Trust.

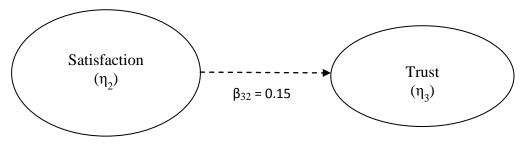


Note: *p<.05; **p<.01; ***p<.001

Hypothesis 6: The Relationship between Consumer Satisfaction and Consumer Trust.

H6 proposed that consumer trust would be influenced by satisfaction. Results showed that satisfaction did not significantly affected trust ($\beta_{32} = 0.15$, t-value = 1.86, p > 0.05) (see Figure 8). Thus, H6 was not supported.

Figure 8. The Relationship between Consumer Satisfaction and Consumer Trust.



Note: *p<.05; **p<.01; ***p<.001

Hypothesis 7: The Relationship between Consumer Satisfaction and Consumer Loyalty.

H7 suggested that consumer loyalty as measured in terms of a) WOM, b) share of wallet, and c) repatronage intention would be influenced by consumer satisfaction. Results showed that while satisfaction significantly affected WOM and share of wallet, it did not significantly affect repatronage intentions (see Figure 9). That is, satisfaction positively influenced WOM ($\beta_{42} = 0.31$, t-value = 7.01, p < 0.001) and share of wallet ($\beta_{52} = 0.38$, t-value = 4.02, p < 0.001). However, satisfaction did not positively influence repatronage intentions ($\beta_{62} = 0.17$, t-value = 1.62, p > 0.05). Thus, H7 was partially supported.

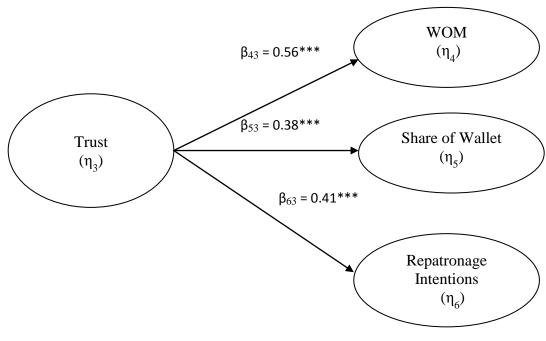
Satisfaction $\beta_{52} = 0.31^{***}$ Share of Wallet (η_2) $\beta_{62} = 0.17$ Repatronage Intentions (η_6)

Figure 9. The Relationship between Consumer Satisfaction and Consumer Loyalty.

Hypothesis 8: The Relationship between Consumer Trust and Consumer Loyalty.

H8 suggested that consumer loyalty as measured in terms of a) WOM, b) share of wallet, and c) repatronage intention would be influenced by consumer trust. Results showed that trust significantly affected WOM, share of wallet, and repatronage intentions (see Figure 10). That is, trust positively influenced WOM ($\beta_{43} = 0.56$, t-value = 4.37, p < 0.001), share of wallet ($\beta_{53} = 0.38$, t-value = 4.62, p < 0.001) and repatronage intentions ($\beta_{63} = 0.41$, t-value = 3.77, p < 0.001). Thus, H8 was supported.

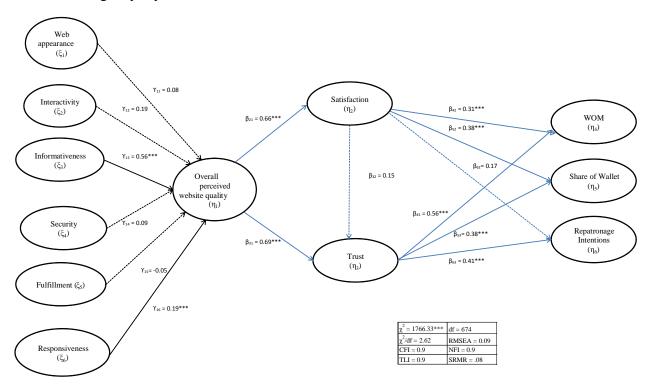
Figure 10. The Relationship between Consumer Trust and Consumer Loyalty.



Summary

This chapter presents statistical analysis (i.e., descriptive statistics, confirmatory factor analysis, and structural equation modeling) and findings related to hypotheses proposed in Chapter II. In the following chapter, a discussion of conclusions related to findings is addressed. Theoretical and managerial implications are also provided. We conclude the next chapter with limitations and future research direction.

Figure 11. Model Predicting Loyalty



CHAPTER V

DISCUSSION AND CONCLUSIONS

This chapter presents the following sections: (1) Discussion, (2) Conclusions, (3) Implications, and (4) Limitations and Future Research Directions.

Discussion

The overall purpose of this study was to propose and empirically examine an integrative model of consumer loyalty within an apparel online shopping context with baby boomer online users. Prior to examining the following objectives, this study first explored the applicability of the construct of website quality with baby boomers.

Specifically, the current study looked to empirically test three core research objectives: 1) to examine the associations between website quality dimensions and overall perceived website quality; 2) to examine the relationship among overall perceived website quality, consumer satisfaction, and trust; and 3) to examine the associations between consumer satisfaction, trust, and consumer loyalty.

Objective 1: Examining the Associations between Website Quality Dimensions and Overall Perceived Website Quality

In answering the first objective, hypothesis 1, 2, and 3 proposed the relationship between the dimensions of website quality and overall perceived website quality.

Hypothesis 1 stated that overall perceived website quality would be influenced by a) web appearance and b) interactivity dimensions of system quality. System quality is defined

as including the characteristics of the e-commerce system (DeLone & McLean, 2003), the degree that the user believes the website is easy to navigate (Palmer, 2002). In addition, system quality also includes factors such as the availability of the website, the ability to move throughout the website, download speeds (Akinci et al., 2010), and style and appearance of the website (Chang et al., 2005; Corbitt et al., 2003). The current dissertation identified web appearance and interactivity as the dimensions of system quality. In the context of this study, web appearance is defined as the attractiveness of the website that reflects the design features such as color, font, graphics, style and language (Aladwani & Palvia, 2002). Findings revealed that web appearance did not positively influence overall perceived website quality ($\gamma_{11} = 0.08$, t-value = 0.52), which is consistent with findings that suggest that esthetics, color, and product presentation is not significant but customer's expect it as a minimum component of a website (Loureiro & Roschk, 2014). There is a general uniformity among many websites especially in the same product category which might explain why web appearance for a single website is not significant. Wang et al. (2011) found that the appearance of a website is perceived with greater satisfaction in a hedonic orientation such as when emotional influence plays a key part of the decision process and that aesthetic attributes are not significant in a utilitarian orientation where product criteria is most important in the purchase decision. Another possible explanation of insignificant path from web appearance to overall perceived website quality is that as the internet has developed the appearance and aesthetics have improved. This study allowed the participant to select a website to provide feedback on and it was not clear if the website and online activity reflected a

hedonic or utilitarian orientation. Suryandari and Paswan (2014) concluded that different product categories, (books/apparel/travel) and whether it is a hedonic or utilitarian orientation indicates a preference for the channel where the search and purchase take place. According to the recent report, "Across the Ages: Generational Impact on Spending," almost fifty percent of baby boomers stated that in the last six months "they focus more on what they need rather than what they want," suggesting an utilitarian orientation to purchases which is greater than other generational cohorts (Millennials 44%, Generation X 48%, and Silents 41%) (NRF, 2014).

To explain the relationship between overall perceived website quality and interactivity, interactivity is defined as a continuous construct capturing the quality of two-way communication between two parties (Alba et al., 1997). As consumer knowledge of technology progresses, they become more comfortable with navigating and using technology (Hoffman & Novak, 1996). A mature understanding of the navigation process develops a positive relationship consumers have with the website (Demangeot & Broderick, 2006). Our, results indicated that the interactivity dimension of system quality did not significantly impact overall perceived website quality ($\gamma_{12} = 0.19$, t-value = 1.06, p > 0.05). This result contradicts previous research by Manganari et al. (2011) that reported that when a consumer perceives a website easy to use they experience more pleasure and have a positive attitude toward the website. Loureiro and Roschk (2014) posit that younger consumers seek to be stimulated during an online experience but older consumers do not; interactivity is one means of stimulating the consumer during their online encounter, which supports the findings of this study. According to a study by

DeCaprio and Swanson (2014) retailers agree that consumers seek personalization during their online experience yet, few retailers have been successful in adequately delivering online personalization. In this study the technological maturity of the respondents was not assessed. However, one of the boundaries of the study included having purchased apparel online in the past. Thus experience with prior online apparel transactions could impact the relationship between interactivity and overall perceived website quality but the user's online experience is not known. As a user's technological experience increases, they become more knowledgeable about a website which positively impacts their perception of the website (Demangeot & Broderick, 2006; Manganari et al., 2011). Yet, Hodroj (2015) suggests that a user's technological experience in the online channel is impacted by their brand and store experience across channels.

Hypothesis 2 stated that overall perceived website quality would be influenced by a) informativeness and b) security dimensions of information quality. Information quality is defined by DeLone and McLean (2003) as including the content presented in a website which is assessed through informativeness and security. Sorum et al. (2012) found that the more experienced a user becomes with a website, the greater their expectation of information quality. According to Dholakia & Zhao (2010) clear product information, the ease of finding information are two key factors of information quality that positively impact website quality. The current study identified informativeness and security as the two dimensions of information quality. In the context of this study, informativeness is defined as the completeness of information and the ability of the personalization of information to meet the consumer's needs (DeLone & McLean, 2003). Consumers who

are comfortable utilizing the internet, shopping on websites, and completing online transactions navigate websites more efficiently while consumers without the experience become confused during navigation of a website. As a result, they are less likely to complete their desired tasks (Demangeot & Broderick, 2006). Our results showed that informativness did positively influence overall perceived website quality ($\gamma_{13} = 0.56$, t-value = 5.88, p < .001). These findings are consistent with Kim and Lennon (2010) suggesting that when adequate information is presented on a website, both in text and visual presentations, consumers are more satisfied with their website experience. Kollmann, Kuckertz, and Kayser (2012) suggest that information overload, poorly presented information, and poorly structured websites may have increased user frustration and consequently online abandonment.

In addition, in the current study, security is defined as the security of the transaction including payment and personal information (Hasan & Abuelrub, 2011). Halaweh and Kamoun (2012) found that there is a difference in consumers' perceived security, where a consumer might trust the information that is being presented on the website but does not view the website as secure when engaging in a transaction. Therefore, it is necessary to evaluate the security of a website during a transaction separately from the trust of the online channel. In this study, it was found that security did not positively influence overall perceived website quality ($\gamma_{14} = 0.09$, t-value = 1.46, p > .05). This finding contradicts previous findings that state that security features of a website do have an impact on website quality (Toufaily, Souiden, & Ladhari, 2013). Halaweh and Kamoun (2012) state that measuring security as a dimension is difficult as

consumers' perceptions of security of websites are affected by website elements such as ability to navigate, vendor fulfillment, and seals of approval.

Hypothesis 3 stated that overall website quality would be influenced by a) fulfillment and b) responsiveness dimensions of service quality. According to Parsuraman et al. (2005) service quality is defined as phases of customer interaction with a website that encourages effective shopping, purchasing, and delivery. DeLone and McLean (2003) define service quality to include all of the support that is delivered to the customer during the purchase and post-purchase process. For the purposes of this study, service quality was measured by the dimensions of fulfillment and responsiveness. Wolfinbarger and Gilly (2003) posit that two dimensions of service quality that are most predominant are fulfillment and reliability. Fulfillment is defined as the order management including the correct product in a timely many (Cristobal et al., 2007). The consumer evaluates the purchase only once the product is received and decides whether it satisfactorily meets the consumer's expectations. Results of this study showed that the dimension of fulfillment did not significantly affect overall perceived website quality (γ_{15} = -0.05, t-value = -0.81, p > .05). This finding suggests that customers expect fulfillment on their order as a minimum. Therefore, the lack of fulfillment is likely to negatively impact overall perceived website quality. These findings contradict Bauer et al. (2006) which state that customers' expectations of fulfillment are important in the evaluation of quality service. As Ladhari (2010) stated, it is imperative for retailers to follow through on their promises in a timely and accurate manner.

Responsiveness in the online channel is defined as a company's ability to complete transactions correctly, deliver personalized attention, and resolve service complaints (Cristobal et al., 2007). Customer service is included in the dimension of responsiveness and occurs at multiple contact points during an online purchase. Our results showed that responsiveness of the service quality dimension significantly affected overall perceived website quality. That is, responsiveness did positively influence overall perceived website quality ($\gamma_{16} = 0.19$, t-value = 2.23, p < .01). This finding is consistent with Xing, Grant, McKinnon and Fernie (2010), stating that retailer's reliability in the online channel is one of the five reasons that consumers choose to engage with the retailer's website. Lee and Lin's (2005) findings state that responsiveness is a dimension that positively affects overall service quality which is consistent with the findings of this study. Suryandari and Paswan (2014) found that increased customer service does not automatically lead to future purchase intentions.

Objective 2: The Examination of the Relationship among Overall Perceived Website Quality, Consumer Satisfaction, and Trust

To answer the second objective, hypothesis 4, 5, and 6 proposed the relationship between overall perceived website quality, consumer satisfaction, and trust. Hypothesis 4 stated that consumer satisfaction would be influenced by overall perceived website quality. Satisfaction is defined as when customer's evaluations of a product or service with regard to their needs and expectations are met (Oliver, 1980). It is suggested that satisfaction in the online channel is a global measure of the entire website (Kim& Stoel, 2004). Our results showed that overall perceived website quality significantly affected

satisfaction. That is, overall perceived website quality did positively influence satisfaction ($\beta_{21} = 0.66$, t-value = 7.05, p < .001). This is consistent with other studies, such as Bai et al. (2008) which concluded that a well-designed website has a positive impact on the consumer's satisfaction with the website during the online experience. Wolfinbarger and Gilly (2003) stated that one outcome of positive website quality is satisfaction and Jeong et al. (2003) concluded that website quality is a factor of satisfaction, which is consistent with the findings of this study.

Hypothesis 5 stated that consumer trust would be influenced by overall perceived website quality. McKnight et al. (2002) define trust as when a consumer is comfortable sharing personal information, making purchases, and acting on web vendor advice. The construct of trust in this study includes the trust of the channel and is separate from the transactional specific security that was addressed as a dimension of information quality. Study results revealed that overall perceived website quality significantly affected trust (β_{31} = 0.69, t-value = 6.85, p < .001). This finding is consistent with Zhou et al. (2009) that found that when customers have a positive experience with a website, they have greater trust for the website. Toufaily et al. (2013) concluded that e-trust as captured through the dimensions of credibility and benevolence have a positive impact on website attitude. It is found that participants who express trust in a website do so as a result of the overall website perception (Tan & Wei, 2006), which is consistent with the findings of this study.

Hypothesis 6 stated that consumer trust would be influenced by satisfaction.

Flavin et al. (2006) found that the more satisfied a customer is with a website, the greater

their trust for the website. In this study, results showed that satisfaction was not an antecedent of trust. That is, satisfaction did not positively influence trust ($\beta_{32} = 0.15$, t-value = 1.86, p > .05). Although this finding contradicts Harris and Goode (2004) who found that satisfaction is antecedent of trust, this study's result is consistent with research conducted by Corbitt et al. (2003) who found that trust is predicted by perceived website quality not satisfaction. This contradiction might be explained by the trust a consumer has developed for a retailer in channels other than online which impacts their trust for the website but not by the customer's satisfaction.

Objective 3: Examining the Associations between Consumer Satisfaction, Trust, and Consumer Loyalty

To answer the third objective, hypothesis 7 and 8 proposed to examine the relationship between consumer satisfaction, trust, and consumer loyalty. Hypothesis 7 stated that consumer loyalty as measured in terms of a) WOM, b) share of wallet, and c) repatronage intention would be influenced by consumer satisfaction. Consumer loyalty is defined by Oliver (1999) as a commitment to repatronize a preferred product or service consistently in the future. Hur et al. (2011) found that satisfaction mediates the relationship between website quality and e-loyalty. Consumer loyalty in this study is measured in terms of WOM, share of wallet, and repatronage intentions. WOM is defined as exchanging information about a product or service experience in the online channel through traditional WOM and website bulletin boards, email, chat rooms, blogs, forums and other computer mediated communication tools (Tsao & Hsieh, 2012). Results of the study found that satisfaction positively influenced WOM ($\beta_{42} = 0.31$, t-value = 7.01, p <

.001). This finding is consistent with results found by Tsao and Hsieh (2012) that revealed that consumers are likely to spread positive WOM about the stores when they are satisfied with their shopping experience.

Share of wallet is defined by Meyer-Waarden (2007) as the "share of category expenditures spent on purchases at a certain store" (p.224). Studies in both online and brick-and-mortar settings typically evaluate share of wallet on actual dollar values of transactions as recorded through the retailer (Carpenter, 2008; Keiningham, Aksoy, Malthouse, Lariviere, & Buoye, 2014). In this study, share of wallet was measured by asking respondents to indicate how much they spent at the website and online in the last six months, and out of every \$500 spent online how much was spent at the website. Because of the difficulty of measuring share of wallet, many studies focus on purchase intentions, not share of wallet (Chang et al., 2012; Jones & Kim, 2010; Kuan et al., 2008; Wells et al., 2011). Results showed that satisfaction significantly affected share of wallet that is ($\beta_{52} = 0.38$, t-value = 4.02, p < .001). This finding is consistent with research conducted by Keiningham et al. (2014) who found that transaction specific satisfaction has an impact on share of wallet, suggesting that the more satisfied the customer is, the more they are willing to spend their money at the store.

Repatronage intentions is the customers intention to purchase again in the future (Dick & Basu, 1994) from a given retailer or website. Results of this study revealed that satisfaction did not positively influence repatronage intentions ($\beta_{62} = 0.17$, t-value = 1.62, p > .05). This finding contradicts findings that state that satisfaction positively impacted revisiting a website and repurchase intentions (Dholakia & Zhao, 2010; Kim & Lennon,

2010). It is not clear if the satisfaction of the website alone impacted repatronage intentions or if a negative offline experience with the product, brand, or retailer impacted satisfaction, which in turn influence repatronage intentions. Kim and Stoel (2004) found that positive satisfaction alone does not influence purchase and repatronage behavior, but other factors (e.g., product quality, merchandise selection and assortment, or price) play an important role in purchase and repatronage behavior.

Hypothesis 8 stated that consumer loyalty as measured in terms of a) WOM, b) share of wallet, and c) repatronage intention would be influenced by consumer trust. Tsao and Hsieh (2012) found that when a consumer trusts a website, they will engage in positive WOM. It was found in this study that trust had a significant impact on WOM $(\beta_{43} = 0.56, \text{ t-value} = 4.37, \text{ p} < .001)$. Ortinau, Babin, and Chebat (2013) found that positive WOM occurs in a virtual environment only when substantial trust is experienced. A study where the average participant age was forty concluded that e-trust as measured in the dimensions of credibility and benevolence influenced WOM through website attitude (Toufaily et al., 2013). When a consumer has trust for the website, they will engage in WOM. Share of wallet is measured in this study by the amount of money that was spent on apparel at the given website in comparison to how much was spent on other website and in brick-and-mortar stores. Our results showed that trust significantly affected share of wallet ($\beta_{53} = 0.38$, t-value = 4.62, p < .001). This finding indicates that when a consumer trusts a website, they are likely to spend more in dollars at the website than at other websites or other shopping venues. This is a key finding because few studies exist that measure share of wallet from a customer's perception instead of actual dollars spent

in a transaction as reported through a retailer's point of purchase system, yet the studies did not include trust as an antecedent to share of wallet but the broad category of loyalty (Garland, 2004; Perkins-Munn et al., 2005). A study conducted by Keiningham, Cooil, Aksoy, Andreassen, and Weiner (2007) concluded that multiple metrics are needed to accurately predict share of wallet and one metric such as trust is not adequate.

Repatronage intention, which is an expression of the likelihood that a customer will revisit and repurchase from a given website, is positively influenced by trust (β_{63} = 0.41, t-value = 3.77, p < .001). This finding is consistent with previous studies that indicate the greater the trust of the website, the greater the repurchase intentions (Pizzuti & Fernades, 2010). Pizzuti and Fernades (2010) further added that when a consumer trusts the technology system and the company, they are more likely to engage in positive WOM and repurchase intentions. Trusting a website through a positive online experience will encourage the customer to revisit the website in the future because they have positive experience with the website. Such positive experience will likely decrease the unknown elements associated with visiting a website for the first time.

Conclusions

Driven by four different research streams: website quality (Wolfinbarger & Gilly, 2003), consumer satisfaction (Oliver, 1980), consumer trust (McKnight et al., 2002), and consumer loyalty (Dholakia & Zhao, 2010), the results of the study successfully establish an integrative model of baby boomer consumer loyalty within an online apparel shopping context. In addition, the multidimensional construct of website quality comprised of system quality, information quality, and service quality (DeLone & McLean, 2003) were

employed. Many of the studies regarding online purchase behavior were conducted using young consumers (Allred et al., 2006; Chang et al., 2012; Hur et al., 2011; Kim & Forsythe, 2010; and Tsao & Hsieh, 2012). Results of the studies assumed that findings would be generalizable for other generational cohorts such as the baby boomer market. While the baby boomer cohort is very large, representing a substantial market, the detailed information about online apparel shopping behavior is unclear. Findings of this study suggest that baby boomers do utilize the online channel when shopping for apparel products. Specifically, when they positively perceive website quality they experience satisfaction and trust; their satisfaction leads to positive WOM and share of wallet. When positive trust is experienced it leads to positive WOM, share of wallet, and repatronage intentions.

Baby boomers have been credited with creating the term "workaholic" and have used the sheer size of their cohort to promote individualism and social causes (National Retail Federation Foundation, 2014). Results of this study indicate that over half of the participants are still employed full time and when purchasing apparel online indicated that they were not purchasing apparel as a gift (87%). This indicates that the motivation of purchasing apparel online is consistent with the characteristics of baby boomers where materialism and self-focus are central to their purchase decisions. Many baby boomers will continue working past the initial age of retirement to support their focus on materialism (Coleman et al., 2006).

Generally, it is believed that the majority of consumers who purchase merchandise from the online channel are younger. Therefore, it has been suggested that

design and website function decisions are made based on that assumption. This study was designed to look specifically at the behavior of baby boomers who had purchased apparel online in an effort to make improvements to websites that targeted baby boomers such as Chadwick's, Chico's, J.Jill, and Talbots. DeLone and McLean (2003) present an updated model of website quality that includes system quality (i.e., web appearance and interactivity), information quality (i.e., informativeness and security), and service quality (i.e., fulfillment and responsiveness) to explain consumers perceived quality of the website. In this study, not all dimensions of perceived website quality had a positive impact on website quality. Neither dimension of system quality (i.e., web appearance and interactivity) was found to influence website quality. This may be that as the knowledge and maturity of the user increases, they become more comfortable with the technology (Hoffman & Novak, 1996). Results of this study indicate that baby boomers are spending a lot of time visiting apparel websites and it is significantly correlated (p < 0.01) to how much was spent at the website. As such, this increased usage might decrease the expectations of website quality. Consequently, system quality does not become an influence of website quality. However, Demangeot and Broderick (2006) found that the greater the consumer's maturity with website navigation, the greater the likelihood that a positive relationship with the website will develop. It can be assumed that as a person ages, there will be changes in sight and cognition that could affect perceptions of web appearance and interactivity which would suggest a negative relationship with website quality. The results of this study did not indicate this occurrence. However, this could be the result of an advanced computer user who has not yet experienced some of the effects

of aging. Nevertheless, this study did not include participants who browsed websites without making a purchase. Therefore, it is unclear whether such issues of web appearance and interactivity may have kept them from subsequently purchasing from a website.

Furthermore, the information quality dimension of informativeness was found to positively impact website quality, indicating that consumers need good information on a website to positively evaluate the website. Surprisingly, the security dimension of information quality did not positively impact website quality. The extant literature suggested that security is difficult to measure because other quality factors impact perceptions of security (Wolfinbarger & Gilly, 2003). Toufaily et al. (2013) concluded that security is an antecedent of trust (dimensions: benevolence and credibility) which are antecedents of overall perceived website quality. This is an interesting finding as initial information suggested that the perception of the lack of security was an obstacle to doing business in the online distribution channel (Forsythe & Shi, 2003). When a lower risk aversion is experienced, shopping motives to purchase in the online channel are significant (Kollmann, Kuckertz, & Kayser, 2012). Again, the computer maturity of the participant could have caused these baby boomers to be less concerned about security because of previous experience in the online channel and with purchasing activities from a website.

In addition, service quality was evaluated through the dimensions of fulfillment and responsiveness. Findings revealed that fulfillment is not a significant indication of website quality. This indicates that there is a basic assumption that the merchandise will

be received by the customer as a minimum expectation. Based on findings reported by Ladhari (2010), it is imperative that an online retailer follow through on their promises in a timely manner for the customer to consider it a positive experience. Results of this study showed that responsiveness has a significant positive impact on website quality, suggesting that how consumer concerns and complaints are handled impact how a consumer evaluates the website that they purchased the merchandise from. As a cohort, baby boomers have been described as being focused on the value of money, time onvenience, and service (Discount Merchandiser, 1993); this is consistent given that responsiveness (service) is a significant factor of website quality.

Furthermore, based on the results of this study, the dimensions of website quality that impact overall perceived website quality include informativeness and responsiveness only. Such results are different from previous studies (Hasan & Abuelrub, 2011; Ladhari, 2010; Sorum et al., 2012), it is unclear if participant age of these baby boomers had an impact on the dimensions of overall perceived website quality as the previous studies only included a younger participants. This is an important finding because website development needs to be focused on the target market. For baby boomers, their evaluation of website quality is vastly different from younger online users.

In this study, overall perceived website quality was found to positively impact satisfaction and trust. Such findings support the importance of website quality and its impact on the consumer's satisfaction and trust which both lead to loyalty. While the dimensions of website quality are not consistent and clear in the extant literature, the relationship among website quality, satisfaction, and trust are supported in this study. The

baby boomer cohort, as revealed in this study, is consistent with younger consumers in relation to perceiving a quality website and its impact on satisfaction (Jeong et al., 2003; Kim & Stoel, 2004; Wolfinbarger & Gilly, 2003) and trust (Corbitt et al., 2003; McKnight et al., 2002; Tan & Wei, 2006). Trust as a construct of loyalty was significant, while security as a dimension of website quality was not. This indicates that trust is a global construct in the bounds of this study. When a retailer establishes trust, customers will have a favorable attitude towards the website and the retailer (Toufaily et al., 2013). However, it is not necessary for a customer to be satisfied in order for them to trust the website as evidenced in this study where satisfaction did not positively influence trust.

Loyalty, which is typically utilized to indicate purchase intentions was studied as comprised of three constructs: WOM, share of wallet, and repatronage intentions.

Satisfaction was found to positively impact WOM and share of wallet, but not repatronage intention. These findings indicate that when consumers are satisfied, they will inform others about their positive experience and are likely to spend money at the website. These results may also suggest the importance of a quality website. In this study, however, when a customer was satisfied, it was not enough to indicate that they would revisit and purchase again from the website. However, product category and purchase motivation (hedonic vs. utilitarian) was not studied as it relates to satisfaction. It is possible that the product category or brand plays a moderating role in the repatronage intention in the online channel of a satisfied customer, where the product purchased for the purposes of the study might not be repurchased regardless of the channel. Our results

indicate that when a customer trusts the website, they will tell others about their experience, spend more money at the website, and will return to purchase again.

This study is the first of its kind that focused solely on the online shopping behaviors of the baby boomer cohort. Other studies (Allred et al., 2006; Chang et al., 2012; Chang et al., 2009; Hur et al., 2011; Jones & Kim, 2010; Kim & Forsythe, 2010; Kuan et al., 2008; Tsao & Hsieh, 2012; Udo et al., 2010; and Zhou et al., 2009) focused on college-aged participants to understand consumer behavior in the online channel. Loureiro and Roschk (2014) posit that in the online environment, age specific effects exist and age accounts for customer specific behavior supporting the need to better understand cohort behavior in the online channel. This study also provides relevant information about how baby boomers evaluate website quality and its impact on satisfaction, trust, and loyalty. In the early days of online retailing, it was believed that the online channel would cannibalize the brick-and-mortar channel. However, as the online environment has developed, it is realized that customers may have a channel preference but the channels work together to provide retailer and brand information (Kollmann, Kuckertz, & Kayser, 2012). Results of this study indicate that there is a significant correlation (p < 0.05) between how much is spent on the website and how much is spent in the brick and mortar store, suggesting that baby boomers are buying consistently between both channels. Multiple channels (brick and mortar, online (further defined as web, mobile, and social media), in-store digital applications, and catalog) working together to deliver information and products to a consumer is known as omnichannel (Hodroj, 2015). As a consumer engages with a brand or retailer, it is increasingly difficult to separate the experience to only one channel, even for an online only retailer (pure play retailer) where social media can influence the retailer or brand. Participants indicated that their purchases in the online channel were made at websites of omnichannel retailers such as JCPenney, Kohl's, Macy's, Chico's, LL Bean, Victoria's Secret and pure play retailers such as Amazon, eBay and Overstock. In addition, according to the National Retail Federation (NRF) Foundation report "Across the Ages: Generational Impact on Spending," (p 5) twenty three percent of apparel purchases are researched online by baby boomers before being purchased in-store. Multichannel customers who purchase apparel in brick and mortar stores are likely to shop online for apparel (Seock & Norton, 2007). Customers move between offline and online channels during the purchase decision process and expect a seamless experience at all points in the process, realizing that the traditional concept of distinct channels is no longer accurate (DeCaprio & Swanson, 2014). The forecast through 2017 for cross channel shopping indicates that half of all in-store purchases will be influenced by web and mobile (Hodroj, 2015).

Implications

The current study offers valuable and significant implications for both academic and practitioners. Theoretical and practical implications are discussed below.

Theoretical Implications

The current dissertation empirically examines an integrative model of consumer loyalty in an apparel online shopping context with respect to the baby boomer cohort.

In the theoretical development of the study of online retailing, there were two main research streams: the technical linear aspect of the technology involved in the Internet commerce and the marketing perspective which includes consumer behavior in the Internet environment. Results of this study indicates that some of the technical aspects (web appearance, interactivity, security, and fulfillment) that were believed to impact website quality did not influence consumers perceived website quality, suggesting that the focus on the technical linear aspects of online retailing are not as important as generally believed. Early channel development focused on the technical aspects of how to make a website function and how to personalize the website for the consumer (Chiou, Lin, & Perng, 2010). However, as the channel developed, it was necessary to include how consumer behavior impacted purchase activity (Dohlakia & Zhao, 2010). The results of this study further contribute to literature, suggesting that it is necessary to study both the technical aspects of the online channel with the consumer behavior implications.

Many retailers agree that there is a balance needed between the technical aspects of online retailing and the marketing perspective. However, few have succeeded in finding the right balance (DeCaprio & Swanson, 2014). In order to produce an effective website, it is necessary to evaluate both the technical and human elements from the perspective of the user (Hausman & Siekpe, 2009). A better understanding of the age specific interactions with the technical elements of the website and the marketing implications for the cohort will allow for a more effective online experience (Loureiro & Roschk, 2014). Results revealed that the baby boomer cohort only views infomativeness and responsiveness as important dimensions of perceived website quality, indicating that

the focus to improve websites should concentrate on the information about the product/retailer and how the retailer responds to the customer's needs. Our results also contribute to the theoretical implications of the generalizable nature of online studies by revealing that age cohorts have different needs. Since the majority of studies involving online customers includes younger participants it is assumed that the sample of the online population is younger. Nevertheless, not enough is known about the median age of the online population.

The findings build on previous studies that incorporated the DeLone and McLean (2003) model of website quality. Specifically, results of the study contribute to the theoretical findings of the DeLone and McLean (2003) model that age and age related cohorts has an impact on the dimensions of website quality. However, it is not clear as to the extent that age impacts the dimensions of website quality because most of the previous findings were all conducted using young computer users. Therefore, there is no previous research to compare. Studies that focus on aging incorporate three dimensions of aging, biological, psychological, and social and how the dimensions impact the situation being studied (Moschis, Mosteller, & Fatt, 2011). As consumers age, they exhibit not only age related changes but changes in response to brands and vendors as they change roles (retiring or when a spouse passes away)(Mathur, Moschis, & Lee, 2008). Our results further support this theoretical foundation that at different ages, consumers engage in different behavior and preferences in the online channel.

Moschis (2012) suggests that when studying consumer behavior of older adults, it is necessary to consider the stage of life that the consumer is experiencing. This study

did not incorporate theories on life stages and only studied the consumer's current stage. Moschis, Mosteller, and Fatt (2011) suggest that the process of aging causes a decline in processing capacity that affects a consumer's ability to process product information. Furthermore, the DeLone and McLean (2003) model does not incorporate any differences in age, assuming all computer users would exhibit the same characteristics regardless of age. Since DeLone and McLean's model is one of the most widely utilized model, the impact of age could significantly change the model and needs future studies. This study contradicts the assumption of the DeLone and McLean (2003) model that all computer users would exhibit the same behavioral characteristics regardless of age.

In addition, the online environment is an example of the theory of disruptive innovation that suggests that technological advancement allows technology to be leveraged in a way that alters traditional business models (Ganesh et al., 2010). Based on the theory of disruptive innovation, previous online studies suggested that consumer behavior in the online channel would mirror their behavior in the offline channel and they would choose one channel over the other (Doherty & Ellis-Chadwick, 2010). This study adds to the literature related to the theory of disruptive innovation as the assumptions of how the baby boomer engages in the online environment changes how they engage with the retailer in general as evidenced through purchase behavior in both online and brick-and-mortar for the same retailer. Many retailers have created strategies for their websites separate from their other channels (brick-and-mortar and catalog); however, the baby boomer consumer is using all channels to gather information and influence their purchase decision (NRF Across the Ages, 2014). Engaging in multiple channels during the

purchase process is now considered the norm among customers (DeCaprio & Swanson, 2014). Purchasing apparel in the online channel is different from other product categories because of the unknown performance of the product due to size and fit. The need to better understand the performance of the product might contribute to the need to engage with multiple channels before making the final purchase decision.

In the research that focuses on the lifestyle of the online customer, this study contributes to existing literature by providing important details about a population that has not been studied, i.e., the baby boomer cohort. Several researchers (e.g., Forsythe & Shi, 2003; Kim & Stoel, 2004; Kwon & Noh, 2010) have criticized many online retailing studies that use young consumers because it does not represent the general population. However, McKnight et al. (2002) contends that student samples are similar to the online population in age and education. No data exists that tracks the age of online users in the entire channel; therefore, it is difficult to indicate what the population of baby boomers online is.

Furthermore, findings of this study support previous studies in relation to consumer satisfaction and its impact on trust and loyalty. Baby boomers who have experience purchasing apparel online do not exhibit overall differences than studies that researched younger consumers. However, it is unclear if baby boomers who do not purchase online exhibit loyalty to a brand or company through a different channel. For example, if they researched a product or style at the company's website but the actual purchase took place in the brick-and-mortar store, the customer's evaluation of the website was not captured in this study but may have impacted their loyalty regardless of

channel. Results of this study also further contribute to the theoretical implications of trust in online retailing where trust has been found to positively impact purchase intention (Chang et al., 2005) and predicts perceived value (Kim & Niehm, 2009). Lastly, findings in this study also further support the findings of previous studies that indicate that loyalty is directly related to trust, satisfaction, and service quality (Harris & Goode, 2004). The Stimulus Organism Response (SOR) model has been utilized to assess the impact of website quality on purchase behavior by showing that website information (stimuli) affections emotions (satisfaction and perceived risk), which influences purchase intention and intention to revisit (Kim & Lennon, 2010). In this dissertation, informativeness (stimuli) positively impacted overall perceived website quality, satisfaction, (both of which are outcomes of emotions), the response is evidenced through share of wallet but not repatronage intentions which contradicts the findings of Kim and Lennon (2012), further contributing to the SOR research.

Managerial Implications

Managerially, the current study provides significant information to retailers and web developers. Based on our results, baby boomers have indicated through their participation in this study that the dimensions of informativeness and responsiveness are the only dimensions of website quality that are important to their evaluation of a quality website. The content that is displayed at the website and the company's response to the customer should be customized to the target market (DeCaprio & Swanson, 2014). Many websites (i.e., Chico's, JCPenney, L.L. Bean, and Macy's) look very similar giving the customer a level consistency when interacting with the website. When developing or

enhancing an online apparel website, it is critical to research online behavior by product category as it has been found that when consumers engage with an apparel website, the longer the visit duration, the higher the sale which differs for an online book retailer or travel service provider (Panagiotelis, Smith, & Danaher, 2014). Results of this study further support the findings that implicate the importance of product category differences in website development (Danaker, Mullarkey, & Essegaier, 2006; Manchanda, Dube, Goh, & Chintagunta, 2006).

As online retailing continues to develop, more work needs to be done to present one brand or one retailer so that the consumer does not see the distribution channel as separate. Therefore, the concept of the omnichannel is important for retailers to understand and incorporate in their website development as the consumer does not differentiate the company in the online channel from the brick-and-mortar location, the relationship with the consumer must be developed in all channels (Kollmann, Kuckertz, & Kayser, 2012). In addition, the findings of this study indicate that trust positively impacts loyalty, suggesting that a retailer needs to focus on their efforts to positively portray the company regardless of which distribution channel the consumer engages in. An encounter in a brick-and-mortar store that is positive will likely impact the consumer's impression of trust when engaging with the company's website (Suryandari & Paswan, 2014).

Following the idea that a consumer's role has an important impact on their consumer behavior, it is important that retailers utilize resources to understand the roles that consumers are in and the changes in roles that impact their purchase decisions.

During the government shutdown in the fall of 2013, seventy nine percent of baby boomers reported that they made at least one lifestyle or attitude change (NRF, 2014). Since many Americans will retire sometime during their 60's, it is important for a retailer to understand as to how the consumers in the age cohort will behave differently once they are no longer employed full-time. In this study, approximately fifty-six percent of the participants were still employed full-time, suggesting that the change to retirement is on the horizon and an impending change in their purchasing habits is looming. Separating the baby boomer cohort based on employment status will give retailers more detailed information to make merchandising and website design decisions from. Mathur, Moschis, and Lee (2008) further posit that when retailers and marketers understand the emotional impact of a major life change, they will be able to impact the loyalty of the consumer. Retailers should focus on understanding the emotional impact of the major life events that are common in the stage of life that baby boomers are in such as retirement, health issues, and the death of a spouse. According to the State of Retailing Online 2015 presented by Shop.org, retailers are working to improve their websites to make shopping more appealing by creating more attractive assortments, offering more directed promotions, and offering effective checkout experiences. Research such as this study, increases the understanding of consumer behavior of a specific generational cohort that will allow retailers to better prepare their assortments, pricing strategies, therefore positively impacting sales. The sheer size of the baby boomer cohort offers the potential for retailers to increase sales if their websites can effectively reach them.

The majority of websites are developed with the younger user in mind because it is believed that they have the most significant interaction with a website (Chang et al., 2012; Hur et al., 2011; Jones & Kim, 2010; Tsao & Hsieh, 2012). However, the results of this study indicate that age does present important dimensions that were not previously included. For example, study results revealed that baby boomers are purchasing apparel online, yet there are specific things that they do differently when purchasing online, like the device that they utilize to purchase online is typically a laptop (43%) or desktop (41%) unlike younger users who purchase using a smartphone or mobile device. Retail strategies should include changes to the technological elements of how the consumer engages with the website. For the baby boomers, they engage with the website through a digital device similar to a computer (laptop, desktop, tablet) which requires different technology than a smartphone. Yet, sales achieved through accessing the online environment via smartphone has increased eighty seven percent over last year, while sales achieved through tablet access only increased fifty two percent it is important to focus on the device that the desired target market utilizes (Mulpuru, 2015). For retailers that target baby boomers such as Chico's, Chadwicks, J.Jill, and Talbots, it is imperative that they include in their strategy further development of the online experience through digital devices such as laptops, desktops, and tablets.

It is vital for a retailer to create trust in their website as trust will positively impact loyalty as measured by WOM, repatronage intentions, and share of wallet. This indicates that trust will affect the current behavior of the customer during their contact with the website (share of wallet) but also future behavior as evidenced in WOM and repatronage

intentions. Satisfaction with a website is equally important for a retailer for the consumer's current behavior as evidenced in share of wallet and future behavior as evidenced in WOM but not important for repatronage intentions.

Limitations and Suggestions for Future Research

This study contains a few limitations. First, the respondents all had experience purchasing apparel in the online environment and were not new computer users as evidenced by their participation in the online consumer panel Mturk. Approximately thirteen percent of the Mturk respondents met the boundaries of the study which included age and having purchased apparel online. As far as age is concerned, the percentage of baby boomers to the overall population is approximately twenty five percent (Colby & Ortman, 2014), suggesting that from an age perspective the sample is not representative of the population. Current statistics do not exist that track the number of baby boomers who have purchased apparel or any product online in order to asses if the sample is representative of the population. Further research needs to include baby boomers who have not purchased apparel online to see whether the users technological maturity is a factor in addition to age. Future studies also should include elements on how physical changes of aging impact the functionality of the interaction between the consumer and the online channel. For example, did the consumer not purchase from a website because; of visual elements of the website. It is necessary to use a credit card, or they did not know the appropriate size.

Second, the current study only evaluated the chronological age of the user.

Research exists that suggests that chronological age does not provide enough detailed

information about the purchase behavior of consumers. Bauer et al. (2006) posit that online shoppers tend to be technology adopters that is not indicated by chronological age. Cognitive age should be evaluated for its impact on website quality and loyalty as studies have not evaluated its significance in the online shopping context. The role that the consumer is currently in such as full-time employee should be researched to understand if the role of the consumer impacts their purchase behavior in the online channel. Findings of this study were heavily weighted by individuals that were still employed and therefore do not include changes that might occur once an individual retires.

This study evaluated website quality but did not account for the impact of the consumer's interaction with the brand and company outside of the online channel. As the online channel has developed, the introduction of the omnichannel has increased the need of retailers to better understand how the consumer views the company in various distribution channels. Additional research into the impact of the omnichannel on the baby boomer cohort is needed in order to better understand the impact of the brand/retailer offline. Future research should investigate if the brand can effectively be studied by one channel alone and if that has an impact on how messages are sent in the various distribution channels.

Furthermore, the boundaries of the study did not control for the website.

Participants were asked to think of a website that they have purchased apparel from in the last six months. The amount of time since the purchase activity could affect what they remember and there was no means to control for offline influences. Future studies that

are designed as an experiment with a website created just for the study would provide information about offline influences and control for cross channel effects.

Finally, the study utilized an online consumer panel to collect information about online shopping. When utilizing a consumer panel, Baker (2011) suggests that results are not representative of the population. Furthermore, members of online panels are found to be heavy users of the Internet (Fulgoni, 2014), panel effects where participants become "professional respondents" can present potential errors when comparing results to the general population (Dennis, 2001). Utilizing an online panel was a limitation of this study. Future studies should seek to reach participants who purchase online via other data collection means to assess the general population of online users

REFERENCES

- Akinci, S., Atilgan-Inan, E., & Aksoy, S. (2010). Re-assessment of E-S-Qual and E-RecS-Qual in a pure service setting. *Journal of Business Research*, 63(3), 232-240. doi: 10.1016/j.jbusres.2009.02.018
- Aladwani, A.M., & Palvia, P.C. (2002). Developing and validating an instrument for measuring user perceived web quality. *Information & Management*, 39(6), 467-476. doi:10.1016/S0378-7206(01)00113-6
- Alba, J., Lynch., J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A., & Wood, S.
 (1997). Interactive home shopping: Consumer, retailer and manufacturer incentives to participate in electronic marketplaces. *Journal of Marketing*, 61(3), 38-53. doi: 10.2307/1251788
- Allred, C., Smith, S., & Swinyard, W. (2006). E-shopping lovers and fearful conservatives: a market segmentation analysis. *International Journal of Retail & Distribution Management*, 34(4/5), 308-333. doi: 10.1108/09590550610660251
- Almousa, M. (2011). Perceived risk in apparel online shipping: A multi dimensional perspective. *Canadian Social Science*, 7(2), 23-31. doi: 10.3968%2Fj.css.1923669720110702.003
- America's aging consumers (1993). Discount Merchandiser, 33(9), 16.
- American Heritage Dictionary, 2nd ed. (1985). Boston, MA: Houghton Mifflin Company.

- Anderson, E.W., Fornell, C., & Lehmann, D.R. (1994). Customer satisfaction, market share, and profitability: Findings from Sweden. *Journal of Marketing*, *58*(3), 53-66. doi: 10.2307/1252310
- Anderson, J.C. & Gerbing, D.W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *103*(3), 411-423. doi: 10.1037/0033-2909.103.3.411
- Anderson, R.E., & Srinivasan, S.S. (2003). E-satisfaction and E-loyalty: a contingency framework. *Psychology and Marketing*, 20(2), 99-121. Retrieved from http://search.proquest.com/docview/227715625?accountid=14604
- Bagozzi, R.P., Yi, Y., & Phillips, L.W. (1991). Assessing construct validity in organizational research. *Administrative Science Quarterly*, *36*(3), 421-458. doi: 10.2307/2393203
- Bai, B., Law, R., & Wen, I. (2008). The impact of website quality on customer satisfaction and purchase intentions: Evidence from Chinese online visitors.

 *International Journal of Hospitality Management, 27(3), 391-402. doi: 10.1016/j.ijhm.2007.10.008
- Baker, J., Levy, M., & Grewal, D. (1992). An experimental approach to making retail store environmental decisions. *Journal of Retailing*, 68(4), 445-460. Retrieved from

- Baker, J., Parasuraman, A., Grewal, D., & Voss, G.B. (2002). The influence of multiple

 Store environment cues on perceived merchandise value and patronage intentions. *Journal of Marketing*, 66(2), 120-141. Retrieved from

 http://www.jstor.org/stable/3203418
- Baker, R. (2011). Uses and misuses of online panels. *International Journal of Market Research*, 53(2), 275- 278. doi: 10.2501/IJMR-53-2-275-286
- Bart, Y., Shankar, V., Sultan, F., & Urban, G.L. (2005). Are the drivers and role of online trust the same for all web sites and consumers? A large-scale exploratory empirical study. *Journal of Marketing*, 69(4), 133-152. doi: 10.1509/jmkg.2005.69.4.133
- Basu, A., & Muylle, S. (1999). Customization in online trade processes. *IEEE*Computer Society Proceedings of the International Workshop on Advanced Issues of E-Commerce and Web-based Information Systems, Santa Clara, CA.
- Basu, A., & Muylle, S. (2002). Online support for commerce processes by web retailers.

 *Decision Support Systems, 34(4), 379-395. doi: 10.1016/S0167-9236(02)00065-9
- Bauer, H.H., Falk, T., & Hammerschmidt, M. (2006). eTransQual: A transaction process-based approach for capturing service quality in online shopping. *Journal of Business Research*, 59(7), 866-875. doi: 10.1016/j.jbusres.2006.01.021
- Bearden, W.O., Sharma, S., & Teel, J.E. (1982). Sample size effects on chi-square and other statistics used in evaluating causal models. *Journal of Marketing Research*, 19(4), 425-430. doi: 10.2307/3151716

- Bechwati, N.N., & Siegal, W.S. (2005). The impact of prochoice process on product returns. *Journal of Marketing Research*, 42(3), 358-367. Retrieved from http://www.jstor.org/stable/30162379
- Belanger, F., Hiller, J.S., & Smith, W.J. (2002). Trustworthiness in electronic commerce: the role of privacy, security, and site attributes. *Journal of Strategic Information*Systems, 11(3), 245-270. doi: 10.1016/S0963-8687(02)00018-5
- Bentler, P.M., & Bonnette, D.C. (1980). Significance tests of goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588-606. doi: 10.1037/0033-2909.88.3.588
- Biswas, D., & Biswas, A. (2004). The diagnostic role of signals in the context of perceived risks in online shopping: Do signals matter more on the web? *Journal of Interactive Marketing*, *18*(3), 30-45. doi: 10.1002/dir.20010
- Bitner, M.J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. *Journal of Marketing*, 56(2), 57-71. doi: 10.2307/1252042
- Bjork, P. (2010). Atmospherics on tour operators' websites: Website features that Stimulate emotional response. *Journal of Vacation Marketing*, *16*(4), 283-296. doi:10.1177/1356766710372243
- Bollen, K.A. (1989). Structural equations with latent variables. New York: Wiley.
- Bonifield, C., Cole, C., & Schultz, R. (2010). Product returns on the internet: A case of mixed signals? *Journal of Business Research*, 63(9-10), 1058-1065. doi: 10.1016/j.jbusres.2008.12.009

- Buhrmester, M., Kwang, T., & Gosling, S.D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality data? *Perspectives on Psychological Science*, 6(1), 3-5. doi: 10.1177/1745691610393980
- Cai, S., & Xu, Y. (2011). Designing not just for pleasure: Effects of web site aesthetics on consumer shopping value. *International Journal of Electronic Commerce*, 15(4), 159-187. doi: 10.2753/JEC1086-4415150405
- Carpenter, J.M. (2008). Consumer shopping value, satisfaction and loyalty in discount retailing. *Journal of Retailing and Consumer Services*, *15*(5), 358-363. doi: 10.1016/j.jretconser.2007.08.003
- Caudron, S. (1997). Boomers rock the system. Workforce, (10928332)76(12), 42.
- Cebi, S. (2013). Determining importance degrees of website design parameters based on interactions and types of websites. *Decision Support Systems*, *54*(2), 1030-1043. doi: 10.1016/j.dss.2012.10.036
- Chang, H.H., Wang, Y.H., & Yang, W.Y. (2009). The impact of e-service quality, customer satisfaction and loyalty on e-marketing: Moderating effect of perceived value. *Total Quality Management*, 20(4), 423-443. doi: 10.1080/14783360902781923
- Chang, K.C., Chen, M.C., Hsu, C.L., & Kuo, N.T. (2012). Integrating loss aversion into a technology acceptance model to assess the relationship between website quality and website user's behavioural intentions. *Total Quality Management*, 23(8), 913-930. doi: 10.1080/14783363.2011.637793

- Chang, M.K., Cheung, W., and Lai, V.S. (2005). Literature derived reference models for the adoption of online shopping. *Information & Management*, 42(4), p.543-559. doi: 10.1016/j.im.2004.02.006
- Chen, J.V., Rungruengsamrit, D., Rajkumar, T.M., & Yen, D.C. (2013). Success of electronic commerce web sites: A comparative study in two countries. *Information & Management*, 50(6), 344-355. doi: 10.1016/j.im.2013.02.007
- Cheng, J., Zhang, C., & Xu, Y. (2009). The role of mutual trust in building members' loyalty to a C2C platform provider. *International Journal of Electronic Commerce*, *14*(1), 147-171. doi: 10.2753/JEC1086-4415140105
- Cheng, F.F., Wu, C.S., & Yen, D.C. (2009). The effect of online store atmosphere on consumer's emotional responses an experimental study of music and color. *Behaviour & Information Technology*, 28(4), 323-334. doi: 10.1080/01449290701770574
- Cheung, M.Y., Luo, C., Sia, C.L., & Chen, H., (2009). Credibility of electronic word of mouth: informational and normative determinants of online consumer recommendations. *International Journal of Electronic Commerce*, 13(4), 9-38. doi: 10.2753/JEC1086-4415130402
- Chiou, W-C., Lin, C-C., & Perng, C. (2010). A strategic framework for website

 Evaluation based on a review of the literature from 1995-2006. *Information & Management*, 47(5-6), 282-290. doi: 10.1016/j.im.2010.06.002

- Cho, S. & Workman, J. (2011). Gender, fashion innovativeness and opinion leadership, and need for touch. *Journal of Fashion Marketing and Management*, 15(3), 363-382. doi: 10.1108/13612021111151941
- Colby, S.L., & Ortman, J.M. (2014). The baby boom cohort in the United States: 2012 to 2060. *Current Populaiton Reports*, 25-1141. Retrieved from www.census.gov.
- Coleman, L.J., Hladikova, M., & Savelyeva, M. (2006). The baby boomer market. *Journal of Targeting, Measurement and Analysis for Marketing 14*(3), 191-209.
- Cooil, B., Keiningham, T.L., Aksoy, L., & Hsu, M. (2007). A longitudinal analysis of customer satisfaction and share of wallet: Investigating the moderating effect of customer characteristics. *Journal of Marketing*, 71(1), 67-83. doi: 10.1509/jmkg.71.1.67
- Corbitt, B.J., Thanasankit, T., and Yi, H. (2003). Trust and e-commerce: a study of consumer perceptions. *Electronic Commerce Research and Applications*, 2(3), 203-215. doi: 10.1016/S1567-4223(03)00024-3
- Cox, D.F. (1967). *Risk taking and information handling in consumer behavior*. Boston: Harvard University.
- Cristobal, E., Flavian, C., and Guinaliu, M. (2007). Perceived e-service quality (PeSQ) measurement validation and effects on consumer satisfaction and web site loyalty.

 *Managing Service Quality, 17(3), 317-340. doi: 10.1108/09604520710744326

- Cyr, D. (2013). Website design, trust and culture: An eight country investigation.

 Electronic Commerce Research and Applications, 12(6), 373-385. doi: 10.1016/j.elerap.2013.03.007
- Danaher, P.J., Mullarkey, G.W., & Essegaier, S. (2006). Factors affecting web site visit duration: A cross-domain analysis. *Journal of Marketing Research*, 43(2), 182-194. Retrieved from http://www.jstor.org/stable/30163385
- Davis, F.D. (1989). Perceived usefulness, perceived ease of use and user acceptance of information technology. *MIS Quarterly*, *13*(3), 319-339. Retrieved from http://search.proquest.com/docview/218114880?accountid=14604
- Day, G.S. (1969). A two-dimensional concept of brand loyalty. *Journal of Advertising*Research, 9(3), 29-35.
- De, P., Hu, Y., & Rahman, M.S. (2013). Product-oriented web technologies and product returns: An exploratory study. *Information Systems Research*, 24(4), 998-1010. doi: 10.1287/isre.2013/0487
- DeCaprio, J. & Swanson, L. (2014). 5 keys to the digital experience equation: leveraging customers, context and content to deliver the optimal digital experience.

 Retrieved from: http://www.oracle.com/us/industries/retail/retail-5-keys-digital-experience-wp-2397695.pdf
- DeLone, W.H. & McLean, E.R. (2003). The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information*Systems, 19(4), 9-30. Retrieved from http://search.proquest.com/docview/218904446?accountid=14604

- Demangeot, C., & Broderick, A.J. (2006). Exploring the experiential intensity of online shopping environments. *Qualitative Market Research: An International Journal*, 9(4), 325-351. doi: 10.1108/13522750610689078
- Dennis, J.M. (2001). Are Internet panels creating professional respondents? *Marketing Research*, *13*(2), 34-38. Retrieved from http://search.proquest.com.libproxy.uncg.edu/docview/202716967?accountid=146
- Dholakia, R.R., & Zhao, M. (2010). Effects of online store attributes on customer satisfaction and repurchase intentions. *International Journal of Retail & Distribution Management*, 38(7), 482-496. doi: 10.1108/09590551011052098
- Diamond, J., & Litt, S. (2009). *Retailing in the twenty-first century*. New York: Fairchild Books.
- Dick, A.S., & Basu, K. (1994). Customer loyalty: Toward an integrated conceptual framework. *Journal of the Academy of Marketing Science*, 22(2), 99-113.
- Dillman, D.A., Smyth, J.D., & Christian, L.M. (2009). *Internet, mail, and mixed-mode surveys* (3rd ed.). NJ: John Wiley & Sons.
- Discount Merchandiser (1993, September). America's aging consumer.
- Doherty, N.F., & Ellis-Chadwick, F.E. (2006). New perspectives in internet retailing: A review and strategic critique of the field. *International Journal of Retail & Distribution Management, 34*(4), 411-428. Retrieved from http://search.proquest.com/docview/210905353?accountid=14604

- Doherty, N.F., & Ellis-Chadwick, F. (2010). Internet retailing: the past, the present and the future. *International Journal of Retail & Distribution Management*, 38(11/12), 943-965. doi: 10.1108/09590551011086000
- Doll, W.J., & Torkzadeh, G. (1988). The measurement of end-user computing satisfaction. *MIS Quarterly*, *12*(6), 259-274. Retrieved from http://search.proquest.com/docview/218128234?accountid=14604
- Dowling, G.R. (1986). Perceived risk: The concept and its measurements. *Psychology* & *Marketing*, *3*(3), 193-210. doi: 10.1002/mar.4220030307
- Dutta, S., & Biren, B. (2001). Business transformation on the internet: results from the 2000 study. *European Management Journal*, 19(5), 449-462. doi: 10.1016/S0263-2373(01)00061-5
- East, R., Gendall, P., Hammond, K., & Lomax, W. (2005). Consumer loyalty: Singular, additive or interactive? *Australasian Marketing Journal*, *13*(2), 10-26. doi: 10.1016/S1441-3582(05)70074-4
- Egger, F.N. (2000). "Trust me, I'm an online vendor": Towards a model of trust for e-Commerce system design. In Proceedings of the CHI Conference on Human Factors in Computing Systems, The Hague, The Netherlands (pp.101-102).
- Federal Trade Commission (2004). The CAN-SPAM Act: requirements for commercial emailers.
- Fisher, P., & Unwin, D. (2002). Virtual reality in geography. New York: Taylor & Francis.

- Flavian, C., Guinaliu, M., & Gurrea, R. (2006). The role played by perceived usability, satisfaction and consumer trust on website loyalty. *Information & Management*, 43(1), 1-14. doi: 10.1016/j.im.2005.01.002
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. doi: 10.2307/3151312
- Forsythe, S.M., & Shi, B. (2003). Consumer patronage and risk perceptions in Internet shopping. *Journal of Business Research*, 56(11), 867-875. doi: 10.1016/S0148-2963(01)00273-9
- Fortune (1986). Retrieved from http://archive.fortune.com/magazines/fortune/fortune500_archive/full/1986/
- Friedman, D.C., Brown, T.A., & Taran, Z. (2011). Specialty store expertise as a driver of satisfaction and share of wallet. *The International Review of Retail, Distribution and Consumer Research*, 21(4), 375-389. doi: 10.1080/09593969.2011.595497
- Fulgoni, G. (2014). Uses and misuses of online-survey panels in digital research. *Journal of Advertising Research*, 54(2), 133-137. doi:10.2501/JAR-54-2-133-137
- Ganesh, J., Reynolds, K.E., Luckett, M., & Pomirleanu, N. (2010). Online shopper motivations, and e-store attributes: An examination of online patronage behavior and shopper typologies. *Journal of Retailing*, 86(1), 106-115. doi: 10.1016/j.jretail.2010.01.003
- Gangopadhyay, A. (2001). An image-based system for electronic retailing. *Decision Support Systems*, 32(2), 107-116. doi: 10.1016/S0167-9236(01)00105-1

- Garbarino, E., & Johnson, M.S. (1999). The different roles of satisfaction, trust, and commitment in customer relationships. *Journal of Marketing*, 63(2), 70-87. doi: 10.2307/1251946
- Garland, R. (2004). Share of wallet's role in customer profitability. *Journal of Financial Services Marketing*, 8(3), 259-268. Retrieved from http://search.proquest.com.libproxy.uncg.edu/docview/195264513?accountid=146
- Gauzente, C., & Roy, Y. (2012). Message content in keyword campaigns, click behavior, and price-consciousness: A study of millennial consumers. *Journal of Retailing* and Consumer Services, 19(1), 78-87. doi: 10.1016/j.iretconser.2011.09.003
- Geistefeld, L.V. (1977). Consumer decision making: The technical efficiency approach. *Journal of Consumer Research*, 4(1), 48-56.
- Goldsmith, R.E. (2002). Explaining and predicting consumer intention to purchase over the internet: an exploratory study. *Journal of Marketing Theory and Practice*, 10(2), 22-28. Retrieved from http://www.jstor.org/stable/23232646
- Goldsmith, R.E., & Flynn, L.R. (2005). Bricks, clicks, and pix: apparel buyers' use of stores, internet, and catalogs compared. *International Journal of Retail & Distribution Management*, *33*(4), 271-283. doi: 10.1108/09590550510593202
- Goldsmith, R.E., & Goldsmith, E.B. (2002). Buying apparel over the Internet. *Journal of Product & Brand Management*, 11(2), 89-102. doi: 10.1108/10610420210423464

- Goritz, A.S., & Luthe, S.C. (2013). Lotteries and study results in market research online panels. *International Journal of Market Research*, *55*(5), 611- 626. doi: 10.2501/IJMR-2013-016
- Grohol, J. (2011). Mechanical Turk to the rescue of psychology research? *Psych**Central.* Retrieved on June 30, 2014, from

 http://psychcentral.com/blog/archives/2011/03/03/mechanical-turk-to-the-rescueof-psychology-research/
- Ha, Y., Kwon, W.S., & Lennon S.J. (2007). Online visual merchandising (VMD) of apparel web sites. *Journal of Fashion Marketing and Management*, 11(4), 477-493. doi: 10.1108/13612020710824553
- Hagel, J., & Armstrong, A.G. (1997). Net gain expanding markets through virtual communities. *The McKinsey Quarterly*, *1*, 141-153. Retrieved from http://bi.galegroup.com/essentials/article/GALE

 A20389925/da7d75cc4b3fdf2106e407cfddeca5cd?u=gree35277
- Hair, J., Black, W.C., Babin, B.J., & Anderson, R. (2010). *Multivariate data analysis* (7th ed.). NJ: Prentice Hall.
- Halaweh, M., & Kamoun, F. (2012). User interface design and e-commerce security perception: An empirical study. *International Journal of E-Business Research*, 8(2), 15. doi: 10.4018/jebr.2012040102
- Harris, L.C., & Goode, M. M. H. (2004). The four levels of loyalty and the pivotal role of trust: a study of online service dynamics. *Journal of Retailing*, 80(2), 139-158. doi: 10.1016/j.jretai.2004.04.002

- Hasan, L., & Abuelrub, E. (2011). Assessing the quality of web sites. *Applied Computing and Informatics*, 9,11-29. doi: 10.1016/j.aci.2009.03.001
- Hausman, A.V., & Siekpe, J.S. (2009). The effect of web interface features on consumer online purchase intentions. *Journal of Business Research*, 62(1), 5-13. doi: 10.1016/j.jbusres.2008.01.018
- Hernandez, B., Jimenez, J., & Martin, M.J. (2009). Adoption vs acceptance of e-commerce: two difference decisions. *European Journal of Marketing*, 43(9/10), 1232-1245. doi: 10.1108/03090560910976465
- Ho., J. (1997). Evaluating the World Wide Web: a global study of commercial sites.

 Journal of Computer-Mediated Communication, 3(1). doi: 10.1111/j.1083-6101.1997.tb00066.x
- Ho, L.A., Kuo, T.H., & Lin, B. (2012). The mediating effect of website quality on Internet searching behavior. *Computers in Human Behavior*, 28(3), 840-848. doi: 10.1016/j.chb.2011.11.024
- Hodroj, A. (2015). *Omni-channel retail and in-memory computing: crossing the*scalability chasm. Retrieved from http://www.gigaspaces.com/omni-channel-white-paper
- Hofacker, C.F. (2008). E-tail constraints and tradeoffs. *Direct Marketing: An International Journal*, 2(3), 129-143. doi: 10.1108/17505930810899294
- Hoffman, D.L., & Novak, T.P. (1996). Marketing in hypermedia computer-mediated environments: Conceptual foundations. *Journal of Marketing*, 60(3), 50-68.

- Hoffman, D.L., & Novak, T.P. (1997). A new marketing paradigm for electronic commerce. *The Information Society*, *13*(1), 43-54. doi: 10.1080/019722497129278
- Hopkins, C.D., Grove, S.J., Raymond, M.A., & LaForge, M.C. (2009). Designing the eservicescape: Implications for online retailers. *Journal of Internet Commerce*, 8(1-2), 23-43. doi: 10.1080/15332860903182487
- Howarton, R., & Lee, B. (2010). Market analysis of fit preferences of female boomers. *Journal of Fashion Marketing and Management*, 14(2), 219-229. doi:

 10.1108/13612021011046075
- Howell, D.C. (2010). *Statistical Methods for Psychology* (7th ed.). CA: Cengage Wadsworth.
- Hsieh, M.T., & Tsao, W.C. (2014). Reducing perceived online shopping risk to enhance loyalty: a website quality perspective. *Journal of Risk Research*, 17(2), 241-261. doi: 10.1080/13669877.2013.794152
- Hu, H., & Jasper, C.R. (2006). Social cues in the store environment and their impact on store image. *International Journal of Retail & Distribution Management*, 34(1), 25-48. doi: 10.1108/09590550610642800
- Hur, Y., Ko, Y.J., & Valacich, J. (2011). A structural model of the relationships between sport website quality, e-satisfaction, and e-loyalty. *Journal of Sport Management*, 25(5), 458-473.
- Hymowitz, C. (2014, January). Baby boomers: poorer in old age than their parents.

 Businessweek. Retrieved from http://www.businessweek.com/articles/

- IBM (2012). Retail 2020: Reinventing retailing once again. *IBM Sales and Distribution*. New York.
- Jacoby, J., & Kyner, D.B. (1973). Brand loyalty vs. repeat purchasing behavior. *Journal* of Marketing Research, 10(1), 1-9. doi: 10.2307/3149402
- Jayawardhena, C., & Wright, L.T. (2009). An empirical investigation into e-shopping excitement: Antecedents and effects. *European Journal of Marketing*, 43(9/10), 1171-1187. doi: 10.1108/03090560910976429
- Jeong, M., Oh, H., & Gregoire, M. (2003). Conceptualizing web site quality and its consequences in the lodging industry. *International Journal of Hospitality Management*, 22(2), 161-175. doi: 10.1016/S0278-4319(03)00016-1
- Johnson, K.P., Lennon, S.J., Jasper, C., Damhorst, M.L., & Lakner, H.B. (2003). An application of Rogers's Innovation Model: Use of the internet to purchase apparel, food, and home furnishing products by small community consumers.

 Clothing and Textiles Research Journal, 21(4), 185-196. doi: 10.1177/0887302X0402100405
- Jones, C., & Kim, S. (2010). Influences of retail brand trust, off-line patronage, clothing involvement and website quality on online apparel shopping intention.

 International Journal of Consumer Studies, 34(), 627-637. doi: 10.111/j.1470-6431.2010.00871.x
- Joreskog, K.G., & Sorbom, D. (1996). *LISREL2: User's reference guide*. Lincolnwood, IL: Scientific Software International.

- Jun, M., Yang, Z., & Kim, D.S. (2004). Customers' perceptions of online retailing service quality and their satisfaction. *International Journal of Quality & Reliability Management*, 21(8), 817-840. doi: 10.1108/02656710410551728
- Kahle, L.R. (1995). Observations: role-relaxed consumers: a trend of the nineties.

 **Journal of Advertising Research, 35(2), 66. Retrieved from http://go.galegroup.com/ps/i.do?id=GALE%CA17042824&v=2.1&u=gree35277 &it=r&p=ITOF&sw=w&asid=2134b81f97c70e8a8ac6161f86ba69fe
- Karaatli,G., & Veryzer, R.W. (2012). The effects of electronic decision aids on consumers' cue utilization in product evaluations. *Journal of Marketing Development and Competitiveness*, 6(1), 74-80. Retrieved from http://search.proquest.com.libproxy.uncg.edu/docview/1019047230?accountid=14 606
- Katz, E., Gurevitch, M., & Haas, H. (1973). On the use of the mass media for important things. *American Sociological Review*, 38(2), 164-181.
- Keiningham, T.L., Aksoy, L., Buoye, A., & Cooil, B. (2011). Customer loyalty isn't enough. Grow your share of wallet. *Harvard Business Review*, 89(10), 29-31. Retrieved from http://bi.galegroup.com/essentials/article/GALE
 A26860508/c008562fea6197d10760929dd68fOf87?u=gree35277
- Keiningham, T.L., Aksoy, L., Malthouse, E.C., Lariviere, B., & Buoye, A. (2014). The cumulative effect of satisfaction with discrete transactions on share of wallet.
 Journal of Service Management, 25(3), 310-333. doi: 10.1108/JOSM-08-2012-0163

- Keiningham, T.L., Cooil, B., Aksoy, L., Andreassen, T.W., & Weiner, J. (2007). The value of different customer satisfaction and loyalty metrics in predicting customer retention, recommendation, and share-of-wallet. *Managing Service Quality*, 17(4), 361-384. doi: 10.1108/09604520710760526
- Kim, D.J., Ferrin, D.L., & Rao, H.R. (2008). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decision Support Systems*, 44(2), 544-564. doi: 10.1016/j.dss.2007.07.001
- Kim, H., & Niehm, L.S. (2009). The impact of website quality on information quality, value, and loyalty intentions in apparel retailing. *Journal of Interactive Marketing*, 23(3), 221-233. doi: 10.1016/j.intmar.2009.04.009
- Kim, H.Y., & Lee, M.Y. (2010). Emotional loyalty and share of wallet: A contingency approach. *Journal of Retailing and Consumer Services*, 17(5), 333-339. doi: 10.1016/j.iretconser.2010.03.014
- Kim, J., & Forsythe, S. (2010). Adoption of dynamic product imagery for online shopping: Does age matter? The International Review of Retail, Distribution and Consumer Research, 20(4), 449-467. doi: 10.1080/09593969.2010.504011
- Kim, J.H., & Lennon, S.J. (2010). Information available on a web site: Effects on consumers' shopping outcomes. *Journal of Fashion Marketing and Management*, 14(2), 247-262. doi: 10.1108/13612021011046093

- Kim, S., & Stoel, L. (2004). Apparel retailers: Website quality dimensions and satisfaction. *Journal of Retailing and Consumer Services*, 11(2), 109-117. doi: 10.1016/S0969-6989(03)00010-9
- Kitchin, R., & Blades, M. (2002). *The Cognition of Geographic Space*. New York: I.B. Tauris.
- Koernig, S. (2003). E-Scapes: The electronic physical environment and service tangibility. *Psychology & Marketing*, 20(2), 151-167. Retrieved from http://search.proquest.com.libproxy.uncg.edu/docview/227757233?accountid=146
- Kollmann, T., Kuckertz, A., & Kayser, I. (2012). Cannibalization or synergy?
 Consumers' channel selection in online-offline multichannel systems. *Journal of Retailing and Consumer Services*, 19(2), 186-194. doi:
 10.1016/j.jretconser.2011.11.008
- Koo, D.M., Kim, J.J., & Lee, S.H. (2008). Personal values as underlying motives of shopping online. Asia Pacific Journal of Marketing and Logistics, 20(2), 156-173. doi: 10.1108/13555850810864533
- Kraay, A., & Ventura, J. (2007). The dot-com bubble, the Bush deficits, and the U.S. current account. *National Bureau of Economic Research*, *G7*, 457-495.
- Kuan, H.H., Bock, G.W., & Vathanophas, V. (2008). Comparing the effects of website quality on customer initial purchase and continued purchase at e-commerce websites. *Behaviour & Information Technology*, 27(1), 3-16. doi: 10.1080/01449290600801959

- Kumar, V., George, M., & Pancras, J. (2008). Cross-buying in retailing: Drivers and consequences. *Journal of Retailing*, 84(1), 15-27.doi:10.1016/j.jretai.2008.01.007
- Kwon, W.S., & Noh, M. (2010). The influence of prior experience and age on mature consumers' perceptions and intentions of internet apparel shopping. *Journal of Fashion Marketing and Management*, 14(3), 335-349. doi: 10.1108/13612021011061825
- Ladhari, R. (2010). Developing e-service quality scales: A literature review. *Journal of Retailing and Consumer Services*, 17(6), 464-477. doi: 10.1016/j.jretconser.2010.06.003
- Lavie, T., & Tractinsky, N. (2004). Assessing dimensions of perceived visual aesthetics of websites. *International Journal of Human-Computer Studies*, 60(3), 269-298. doi: 10.1016/j.ijhcs.2003.09.002
- Lee, G.G., & Lin, H.F. (2005). Customer perceptions of e-service quality in online shopping. *International Journal of Retail & Distribution Management*, *33*(2), 161-176. doi: 10.1108/09590550510581485
- Lee, Y., & Kozar, K.A. (2006). Investigating the effect of website quality on e-business success: An analytic hierarchy process (AHP) approach. *Decision Support*Systems, 42(3), 1383-1401. doi: 10.1016/j.dss.2005.11.005
- Leppel, K., & McCloskey, D.W. (2011). A cross-generational examination of electronic commerce adoption. *Journal of Consumer Marketing*, 28(4), 261-268. doi: 10.1109/07363761111143150

- Li, H., Kuo, C., & Rusell, M.G. (1999). The impact of perceived channel utilities, shopping orientations, and demographics on the consumer's online buying behavior. *Journal of Computer-Mediated Communication*, *5*(2), 0. doi: 10.1111/j.1083-6101.1999.tb00336.x
- Liljander, V., Polsa, P., & Van Riel, A. (2009). Modeling consumer responses to an apparel store brand: Store image as a risk reducer. *Journal of Retailing and Consumer Services*, 16(4), 281-290. doi: 10.1016/j.jretconser.2009.02.005
- Littrell, M.A., Ma, Y.J., & Halepete, J. (2005). Generation X, Baby Boomers, and Swing: marketing fair trade apparel. *Journal of Fashion Marketing and Management*, 9(4), 407-419. doi: 10.1108/13612020510620786
- Liu, C., & Arnett, K.P. (2000). Exploring the factors associated with Web site success in the context of electronic commerce. *Information & Management*, 38(1), 23-33. doi: 10.1016/S0378-7206(00)00049-5
- Liu, C.T., Du, T.C., & Tsai, H.H. (2009). A study of the service quality of general portals. *Information & Management*, 46(1), 52-56. doi: 10.1016/j.im.2008.11.003
- Ljungqvist, A., & Wilhelm, W.J. (2003). IPO pricing in the dot-com bubble. *The Journal of Finance*, 58(2),723-752. doi: 10.1111/1540-6261.00543
- Loiacono, E.T., Watson, R.T., & Goodhue, D.L. (2007). WebQual: An instrument for consumer evaluation of web sites. *International Journal of Electronic Commerce*, 11(3), 51-87. doi: 10.2753/JEC1086-4415110302

- Loureiro, S.M.C., & Roschk, H. (2014). Differential effects of atmospheric cues on emotions and loyalty intention with respect to age under online/offline environment. *Journal of Retailing and Consumer Services*, 21(2), 211-219. doi: 10.1016/j.jretconser.2013.09.001
- Luo, M.M, Chen, J.S., Ching, R.K.H., & Liu, C.C. (2011). An examination of the effects of virtual experiential marketing on online customer intentions and loyalty. *The Service Industries Journal*, 31(13), 2163-2191. doi: 10.1080/02642069.2010.503885
- Magi, A.W. (2003). Share of wallet in retailing: the effects of customer satisfaction, loyalty cards and shopper characteristics. *Journal of Retailing*, 79(2), 97-106. doi: 10.1016/S0022-4359(03)00008-3
- Malhotra, N.K. (2010). *Marketing research: An applied orientation* (6th ed.). NJ: Pearson Prentice Hall.
- Manchanda, P., Dube, J.P., Goh, K.Y., & Chintagunta, P.K. (2006). The effect of banner advertising on internet purchasing. *Journal of Marketing Research*, 43(1), 98-108. Retrieved from http://www.jstor.org/stable/30163374
- Manganari, E., Siomkos, G., Rigopoulou, I., & Vrechopoulos, A. (2011). Virtual store layout effects on consumer behavior. *Internet Research*, 21(3), 326-346. doi: 10.1108/03090560910976401
- Mathur, A., Moschis, G.P., & Lee, E. (2008). A longitudinal study of the effects of life status changes on changes in consumer preferences. *Journal of the Academy of Marketing Science*, *36*(2), 234-246. doi: 10.1007/s11747-007-0021-9

- Mattila, A.S. (2007). The impact of affective commitment and hotel type in influencing guests' share of wallet. *Journal of Hospitality & Leisure Marketing*, 15(4), 55-68. doi: 10.1300/J150v15n04_04
- McDevitt, P.K., & Small, M.H. (2002). Proprietary market research: are online panels appropriate? *Marketing Intelligence & Planning*, 20(5), 285-296 doi.org/10.1108/02634500210441530
- McKnight, D.H., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An integrative typology. *Information Systems**Research, 13(3), 334-359. Retrieved from http://www.jstor.org/stable/23015741
- MetLife (2010). The MetLife study of inheritance and wealth transfer to baby boomers.

 MetLife Mature Market Institute. New York.
- Meyer-Waarden, L. (2007). The effects of loyalty programs on customer lifetime duration and share of wallet. *Journal of Retailing*, 83(2), 223-236. doi: 10.1016/j.iretai.2007.01.002
- Moeller, P. (2013, May). Gen X and late Baby Boomers face bleak retirements. *US News*.

 Retrieved from http://money.usnews.com/money/
- Moore, M., & Carpenter, J.M. (2008). Intergenerational perceptions of market cues among US apparel consumers. *Journal of Fashion Marketing and Management*, 12(3), 323-337. doi: 10.1108/13612020810889281
- Morgan, R.M., & Hunt, S.D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3), 20-38.

- Moschis, G.P. (2012). Consumer behavior in later life: Current knowledge, issues, and new directions for research. *Psychology & Marketing*, 29(2), 57-75. doi: 10.1002/mar.20504
- Moschis, G.P., Mosteller, J., & Fatt, C.K. (2011). Research frontiers on older consumers' vulnerability. *The Journal of Consumer Affairs*, 45(3), 467-491. doi: 10.1111/j.1745-6606.2011.01213.x
- Mukherjee, A., & Nath, P. (2007). Role of electronic trust in online retailing. *European Journal of Marketing*, 41(9/10), 1173-1202. doi: 10.1108/03090560710773390
- Mulpuru, S. (2015). The state of retailing online 2015: Key metrics, initiatives, and mobile benchmarks. Retrieved from https://nrf.com/who-we-are/retail-communities/digital-retail-shoporg/state-of-retailing-online
- Muylle, S., & Basu, A. (2004). Online support for commerce processes and survivability of web retailers. *Decision Support Systems*, 38(1), 101-113. doi: 10.1016/S0167-9236(03)00074-5
- Naderi, I. (2013). Beyond the fad: a critical review of consumer fashion involvement.

 *International Journal of Consumer Studies, 37(1), 84-104. doi:10.1111/j.1470-6431.2011.01041.x
- Namuduri, K., & Ram, P. (2001). Always there for you. *Intelligent Enterprise*, 4(6), 56.
- National Retail Federation Foundation (2014). *Across the Ages: generational impact on spending*. Retrieved from https://nrf.com/resources/retail-library/across-the-ages-generational-impact-spending

- Nunnally, J.C., & Bernstein, I.H. (1994). *Psychometric theory* (3rd ed). New York: McGraw-Hill.
- Oliver, R.L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460-469. doi: 10.2307/3150499
- Oliver, R.L. (1999). Whence consumer loyalty? *Journal of Marketing*, *63*(Fundamental Issues and Directions for Marketing), 33-44. doi: 10.2307/1252099
- Ortinau, D.J., Babin, B.J., & Chebat, J.C. (2013). Development of new empirical insights in consumer-retailer relationships within online and offline retail environments:

 Introduction to the special issue. *Journal of Business Research*, 66(7), 795-800.

 doi: 10.1016/j.jbusres.2011.06.003
- Paik, I., Han, T., Oh, D., Ha, S., & Park, D. (2003). An affiliated search system for an electronic commerce and software component architecture. *Information and Software Technology*, 45(8), 479-497. doi: 10.1016/S0950-5849(03)00028-4
- Palmer, J.W. (2002). Web site usability, design, and performance metrics. *Information Systems Research*, 13(2), 151-167. doi: 10.1287/isre.13.2.151.88
- Panagiotelis, A., Smith, M.S., & Danaher, P.J. (2014). From Amazon to Apple: Modeling online retail sales, purchase incidence, and visit behavior. *Journal of Business & Economic Statistics*, 32(1), 14-29. doi: 10.1080/07350015.2013.835729

- Paolacci, G., Chandler, J., & Ipeirotis, P.G. (2010). Running experiments on Amazon Mechanical Turk. *Judgment and Decision Making*, 5(5), 411-419. Retrieved from http://search.proquest.com.libroxy.uncg.edu/docview/1011330798?accountid=146 04
- Papadopoulou, P., & Pelet, J.E. (2011). The effect of e-commerce websites' colors on customer trust. *International Journal of E-Business Research*, 7(3), 1-18, doi: 10.401/jebr.2011070101.
- Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1988). SERVQUAL: A multipleitem scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40. Retrieved from

 http://search.proquest.com.libproxy.uncg.eud/docview/275110595?accountid=146

 04
- Parasuraman, A., Zeithaml, V.A., & Malhotra, A. (2005). E-S-Qual: a multiple-item scale for assessing electronic service quality. *Journal of Service Research*, 7(3), 213-233. doi: 10.1177/1094670504271156
- Park, J., Lee, D., & Ahn, J. (2004). Risk-focused e-commerce adoption model: A cross-country study. *Journal of Global Information Technology Management*, 7(2), 6-30. Retrieved from http://search.proquest.com.libproxy.uncg.edu/docview/228609374?accountid=146

- Pavlou, P.A. (2003). Consumer intentions to adopt electronic commerce incorporating trust and risk in the technology acceptance model. *International Journal of Electronic Commerce*, 7(3), 101-134. Retrieved from http://www.jstor.org/stable/27751067
- Pentecost, R., & Andrews, L. (2010). Fashion retailing and the bottom line: The effects of generational cohorts, gender, fashion fanship, attitudes and impulse buying on fashion expenditure. *Journal of Retailing and Consumer Services*, 17(1), 43-52. doi: 10.1016/j.jretconser.2009.09.003
- Perkins-Munn, T., Aksoy, L., Keiningham, T.L., & Estrin, D. (2005). Actual purchase as a proxy for share of wallet. *Journal of Service Research*, 7(3), 245-256. doi: 10.1177/1094670504271149
- Pitt, L.F., Watson, R.T., & Kavan, C.B. (1995). Service quality: A measure of information systems effectiveness. *MIS Quarterly*, 19(2), 173-187. doi: 10.2307/249687
- Pizzutti, C., & Fernandes, D. (2010). Effect of recovery efforts on consumer trust and loyalty in e-tail: A contingency model. *International Journal of Electronic Commerce*, 14(4), 127-160. doi: 10.2753/JEC1086-4415140405
- Reisenwitz, T., & Iyer, R. (2007). A comparison of younger and older baby boomers: investigating the viability of cohort segmentation. *Journal of Consumer Marketing*, 24(4), 202-213. doi: 10.1108/07363760710755995

- Reisenwitz, T., Iyer, R., Kuhlmeier, D.B., & Eastman, J.K. (2007). The elderly's internet usage: an updated look. *Journal of Consumer Marketing*, 24(7), 406-418. doi: 10.1108/07363760710834825
- Ribbink, D., van Riel, A.C.R., Liljander, V., & Streukens, S. (2004). Comfort your online customer: quality, trust and loyalty on the internet. *Managing Service Quality*, 14(6), 446-456. doi: 10.1108/09604520410569784
- Rigby, J. (2005). Marketing to the over 50s: dispelling myths and mothballs. Brand Strategy
- Roberts, J.A., & Manolis, C. (2000). Baby boomers and busters: an exploratory investigation of attitudes toward marketing, advertising and consumerism. *The Journal of Consumer Marketing*, *17*(6), 481-499. doi: 10.1108/07363760010349911
- Roman, S. (2007). The ethics of online retailing: A scale development and validation from the consumers' perspective. *Journal of Business Ethics*, 72(2), 131-148. doi: 10.1007/s10551-006-9161-y
- Schumacker, R., & Lomax, R.G. (2010). *A beginner's guide to Structural Equation Modeling*. (3rd ed.). NY:Routledge
- Sclaroff, S., Cascia, M.L., & Sethi, S. (1999). Unifying textual and visual cues for content-based image retrieval on the world wide web. *Computer Vision and Image Understanding*, 75(1/2), 86-98. doi: 10.1006/cviu.1999.0765

- Seock, Y.K., & Norton, M. (2007). Attitude toward internet web sites, online information search, and channel choices for purchasing. *Journal of Fashion Marketing and Management*, 11(4), 571-586. doi: 10.1108/13612020710824616
- Sherman, E., Mathur, A., & Smith, R.B. (1997). Store environment and consumer purchase behavior: Mediating role of consumer emotions. *Psychology & Marketing*, *14*(4), 361-378. doi: 10.1002/(SIC)1520-6793(199707)14:4<361::AID-MAR4>3.0.CO;2-7
- Sheth, J., & Parvatiyar, A. (1995). Relationship marketing in consumer markets:

 Antecedents and consequences. *Journal of the Academy of Marketing Science*,

 23(4), 255-271. doi: 10.1177/009207039502300405
- Sheynikhovich, D., & Arleo, A. (2010). A reinforcement learning approach to model interactions between landmarks and geometric cues during spatial learning. *Brain Research*, *1365*, 35-47. doi: 10.1016/j.brainres.2010.09.091
- Shih, H.P. (2004). An empirical study on predicting user acceptance of e-shopping on the web. *Information & Management*, 41(3), 351-368. doi: 10.1016/S0378-7206(03)00079-X
- Shulman, J.D., Coughlan, A.T., & Savaskan, R.C. (2011). Managing consumer returns in a competitive environment. *Management Science*, *57*(2), 347-362. doi: 10.1287/mnsc.1100.1274
- Silvers, C. (1997). Smashing old stereotypes of 50-plus America. *The Journal of Consumer Marketing*, *14*(4), 303-309. doi: 10.1108/07363769710188554

- Solomon, M. R. (2009). *Consumer Behavior: Buying, Having, and Being*. Upper Saddle River, New Jersey: Pearson Prentice Hall.
- Sorum, H., Andersen, K., & Vatrapu, R. (2012). Public websites and human-computer interaction: An empirical study of measurement of website quality and user satisfaction. *Behaviour & Information Technology*, 31(7), 697-706. doi: 10.1080/0144929X.2011.577191
- Sousa, R., & Voss, C. (2012). The impacts of e-service quality on customer behavior in multi-channel e-services. *Total Quality Management*, 23(7), 789-806. doi: 10.1080/14783363.2012.661.139
- Srinivasan, S.S., Anderson, R., & Ponnavolu, K. (2002). Customer loyalty in e-commerce: An exploration of its antecedents and consequences. *Journal of Retailing*, 78(1), 41-50. doi: 10.1016/S0022-4359(01)00065-3
- Stahl, G. (1964). The marketing strategy of planned visual communications. *Journal of Marketing*, 28(1), 7-11
- Stroud, D. (2005). Marketing to the over 50s: sea change for silver surfers. *Brand Strategy*.
- Suryandari, R.T., & Paswan, A.K. (2014). Online customer service and retail typeproduct congruence. *Journal of Retailing and Consumer Services*, 21(1), 69-76. doi: 10.1016/j.jretconser.2013.08.004
- Swinyard, W.R., & Smith, S.M. (2003). Why people (don't) shop online: A lifestyle study of the internet consumer. *Psychology & Marketing*, 20(7), 567-597. doi: 10.1002/mar.10087

- Szymanski, D.M., & Hise, R.T. (2000). E-satisfaction: an initial examination. *Journal of Retailing*, 76(3), 309-322. Retrieved from http://search.proquest.com.libproxy.uncg.edu/docview/228616645?accountid=146
- Tam, K.Y., & Ho, S.Y. (2005). Web personalization as a persuasion strategy: An elaboration likelihood model perspective. *Information Systems Research*, 16(3), 271-291. Retrieved from http://www.jstor.org/stable/23015755
- Tan, G.W., & Wei, K.K. (2006). An empirical study of web browsing behavior:

 Towards an effective website design. *Electronic Commerce Research and Applications*, 5(4) 261-271. doi: 10.1016/j.elerap.2006.04.007
- Teo, H.H., Oh, L.B., Liu, C., & Wei, K.K. (2003). An empirical study of the effects of interactivity on web user attitude. *International Journal of Human-Computer Studies*, 58(3), 281-305. doi: 10.1016/S1071-5819(03)00008-9
- Thomas, J.B., & Peters, C.L.O. (2009). Silver seniors: Exploring the self-concept, lifestyles, and apparel consumption of women over age 65. *International Journal of Retail and Distribution Management*, 37(12), 1018-1040. doi: 10.1108/09590550911005001
- Tong, X. (2010). A cross-national investigation of an extended technology acceptance model in the online shopping context. *International Journal of Retail & Distribution Management*, 38(10), 742-759. doi: 10.1108/09590551011076524

- Toufaily, E. Souiden, N., & Ladhari, R. (2013). Consumer trust toward retail websites:

 Comparison between pure click and click-and-brick retailers. *Journal of Retailing*and Consumer Services, 20(6), 538-548. doi: 10.1016/j.jretconser.2013.05.001.
- Tsao, W.C., & Hsieh, M.T. (2012). Exploring how relationship quality influences positive eWOM: The importance of customer commitment. *Total Quality Management*, 23(7), 821-835. doi: 10.1080/14783363.2012.661137
- Udo, G.J., Bagchi, K.K., & Kirs, P.J. (2010). An assessment of customers' e-service quality perception, satisfaction and intention. *International Journal of Information Management*, 30(6), 481-492. doi: 10.1016/j.ijinfomgt.2010.03.005
- van Iwaarden, J., van der Wiele, T., Ball, L., & Millen, R. (2004). Perceptions about the quality of web sites: a survey amongst students at Northeastern University and Erasmus University. *Information & Management*, 41(8), 947-959. doi: 10.1016/j.im.2003.10.002
- Vuori, S., & Holmlund-Rytkonen, M. (2005). 55+ people as internet users. *Marketing Intelligence & Planning*, 23(1), 58-76. doi: 10.1108/02634500510577474
- Wang, S.L.A. (2003). Customer testimonials and news clips as contextual cues in the consumer cognitive processing of online shopping. *Journal of Promotion Management*, 9(1/2), 145-162. doi: 10.1300/J057v09n01_12
- Wang, Y.J., Minor, M.S., & Wei, J. (2011). Aesthetics and the online shopping environment: Understanding consumer responses. *Journal of Retailing*, 87(1), 46-58. doi: 10.1016/j.jretai.2010.09.002

- Wang, Y.S. (2008). Assessing e-commerce systems success: a respecification and validation of the DeLone and McLean model of IS success. *Information Systems Journal*, 18(5), 529-557. doi: 10.1111/j.1365-2575.2007.00268.x
- Watchravesringkan, K., & Shim, S. (2003). Information search and shopping intentions through internet for apparel products. *Clothing and Textiles Research Journal*, 21(1), 1-7. doi: 10.1177/0887302X0302100101
- Weisberg, J., Te'eni, D., & Arman, L. (2011). Past purchase and intention to purchase in e-commerce. *Internet Research*, 21(1), 82-96. doi: 10.1108/10662241111104893
- Wells, J.D., Valacich, J.S., & Hess, T.J. (2011). What signal are you sending? How website quality influences perceptions of product quality and purchase intentions. *MIS Quarterly*, *35*(2), 373-396.
- Williams, R., & Kitchen, P.J. (2009). Involvement, elaboration and the sources of online trust. *International Journal of Technology and Human Interaction*, 5(2), 1-22.
 Retrieved from
 http://search.proquest.com.libproxy.uncg.edu/docview/223245006?accountid=146
 04
- Wolfinbarger, M., & Gilly, M.C. (2003). eTailQ: Dimensionalizing, measuring and predicting etail quality. *Journal of Retailing*, 79(3), 183-198. doi: 10.1016/S0022-4359(03)00034-4
- Wood, S.L. (2001). Remote purchase environments: the influence of return policy leniency on two-stage decision processes. *Journal of Marketing Research*, *38*(2), 157-169. Retrieved from http://www.jstor.org/stable/1558621

- Xing, Y., & Grant, D.B. (2006). Physical distribution service quality in online retailing.
 International Journal of Physical Distribution & Logistics Management, 40(5),
 415-432. doi: 10.1108/09600031011052859
- Yang, K., & Jolly, L.D. (2008). Age cohort analysis in adoption of mobile data services: gen Xers versus baby boomers. *Journal of Consumer Marketing*, 25(5), 272-280. doi: 10.1108/07363760810890507
- Yen, B., Hu, P.J., & Wang, M. (2007). Toward an analytical approach for effective Web site design: A framework for modeling, evaluation and enhancement. *Electronic Commerce Research and Applications*, 6(2), 159-170. doi: 10.1016/j.elerap.2006.11.004
- Yoo, B., & Donthu, N. (2001). Developing a scale to measure the perceived quality of an internet shopping site (SITEQUAL). *Quarterly Journal of Electronic Commerce*, 2(1), 31-46.
- Zhou, T., Lu, Y., & Wang, B. (2009). The relative importance of website design quality and service quality in determining consumers' online repurchase behavior.

 **Information Systems Management, 26(4), 327-337. doi: 10.1080/10580530903245663
- Zickuhr, K. (2010). *Major trends in online activities*. Pew Research Internet Project.

 Retrieved from Pew Internet website:

 http://www.pewinternet.org/2010/12/16/major-trends-in-online-activities/

APPENDIX A SURVEY

Section 1:

Please think <u>about your recent visit to any retail website or online purchase of merchandise</u> that you can recall vividly.

When did your online apparel visit occur?	
Within the last 30 days	
1-2 months ago	
3-4 months ago	
5-6 months ago	
What was the purpose of your visit?	
Just browsing	
Finding information	
Looking to purchase	
Comparison shopping	
Purchasing a product	
Purchasing a gift	
Looking for additional store information & services	
Did you purchase anything from the website? No Yes (if yes, special	ify:
)	
What was the name of the website/retail store/company?	
How did you access the website (i.e. mobile phone, desktop, tablet, etc.)?	
Mobile phone	
Desktop	
Tablet	
Laptop	
IPad	
Other	

Please answer the following questions based on the recent online experience from section 1.

Section 2: Website Perceptions

Please indicate your level agreement or disagreement with the following statements that best describes the website that you visited or purchased from.

		Strongly Disagree		Neutral		Strongly Agree	
1.	The website looks organized.	1	2	3	4	5 5	NA
2	The website is visually appealing.	1	2	3	4	5	NA
3.	The display pages within the website are easy to read.	1	2	3	4	5	NA
4.	The website looks secure for carrying out transactions (e.g., uses digital certificates, seal of approval, etc.).	1	2	3	4	5	NA
5.	The website looks easy to navigate.	1	2	3	4	5	NA
6.	The website has adequate or effective search functions.	1	2	3	4	5	NA
7.	The website is always up and available.	1	2	3	4	5	NA
8.	The website has valid links (hyperlinks).	1	2	3	4	5	NA
9.	The website can be personalized or customized to meet one's needs.	1	2	3	4	5	NA
10.	The web pages load fast in the website.	1	2	3	4	5	NA
11.	The website is easy to access (i.e., has a reflective and widely known name).	1	2	3	4	5	NA
12.	It is quick and easy to complete a transaction.	1	2	3	4	5	NA
13.	The website is a preferable alternative to calling customer service or sales.	1	2	3	4	5	NA
14.	This site launches and runs right away.	1	2	3	4	5	NA
15.	The website is a good source of product information.	1	2	3	4	5	NA
16.	The content of the website is concise.	1	2	3	4	5	NA
17.	The content of the website is accurate.	1	2	3	4	5	NA
18.	The website allows me to interact with it to receive tailored information.	1	2	3	4	5	NA
19.	The website adequately meets my information needs.	1	2	3	4	5	NA
20.	My privacy is protected at this site.	1	2	3	4	5	NA

21.	My transactions are safe with this website.	1	2	3	4	5	NA
22.	The website has adequate security features.	1	2	3	4	5	NA
23.	The website keeps my personal information safe.	1	2	3	4	5	NA
24.	The site protects information about my credit card.	1	2	3	4	5	NA
25.	The product that came was represented accurately by the website	1	2	3	4	5	NA
26.	I got what I ordered from this site	1	2	3	4	5	NA
27.	The product is delivered by the time promised by the company.	1	2	3	4	5	NA
28.	The company makes items available for delivery within a suitable time frame.	1	2	3	4	5	NA
29.	The website is truthful about its offerings.	1	2	3	4	5	NA
30.	It is easy to find contact information on the website (e.g. e-mail addresses, phone numbers, etc.).	1	2	3	4	5	NA
31.	It is easy to find information related to customers' policies on the website (e.g. privacy and dispute details).	1	2	3	4	5	NA
32.	It is easy to find information related to customer service on the website.	1	2	3	4	5	NA
33.	The company is willing and ready to respond to customer service needs.	1	2	3	4	5	NA
34.	When I have a problem, the company shows a sincere interest in solving it.	1	2	3	4	5	NA
35.	Inquiries are answered promptly.	1	2	3	4	5	NA
36.	The company provides me with convenient options for returning items.	1	2	3	4	5	NA
37.	This website handles product returns well.	1	2	3	4	5	NA
38.	Overall, the website worked very well technically.	1	2	3	4	5	NA
39.	Visually, the website resembled other sites I think highly of.	1	2	3	4	5	NA
40.	The website was simple to navigate.	1	2	3	4	5	NA

41.	On the website, it was easy to find	1	2	3	4	5	NA
	the information I wanted.						
42.	The website is of high quality.	1	2	3	4	5	NA

Section 3: Online retailing outcome

Please indicate your agreement or disagreement with the following statements that best describes the website that you have purchased from.

		Stron Disag	-		S	trongly Agree	
1.	The company appreciates my business.	1	2	3	4	5	NA
2.	The company makes an effort to increase its share of my business.	1	2	3	4	5	NA
3.	The company does proactively cultivate its relationships with me.	1	2	3	4	5	NA
4.	I will take some of my business to a competitor that offers better prices.	1	2	3	4	5	NA
5.	I am satisfied with my decision to visit the website.	1	2	3	4	5	NA
6.	I think I made the right decision by visiting the website.	1	2	3	4	5	NA
7.	I feel good about how things go when I do purchase or browse on this website	1	2	3	4	5	NA
8.	I always feel confident that I can rely on this website to do business when I interact with them.	1	2	3	4	5	NA
9.	In general, I feel that this website is competent at serving its customers.	1	2	3	4	5	NA
10.	I feel that most internet retailers are good at what they do.	1	2	3	4	5	NA
11.	I feel assured that legal and technological structures adequately protect me from problems on this website.	1	2	3	4	5	NA
12.	I am likely to encourage friends and others to do business with this website.	1	2	3	4	5	NA
13.	I would say positive things about this website to other people.	1	2	3	4	5	NA
14.	I always refer my acquaintances to	1	2	3	4	5	NA

this website.

15.	I am likely to purchase from apparel (clothing) websites within the next six months.	1	2	3	4	5	NA
16.	I intend to purchase through this website in the near future.	1	2	3	4	5	NA
17.	It is likely that I will purchase through this website in the near future.	1	2	3	4	5	NA
18.	I am likely to revisit this website in the near future.	1	2	3	4	5	NA
19.	I consider myself to be a loyal patron of this website.	1	2	3	4	5	NA

Section 4: General and Demographic Information

Please $\sqrt{}$ in front of your answer that reflects the online experience that you previously referenced.

	Never	1-3 times
	4-6 times	7-9 times
	10-12 times	More than 12 time
How much did yo	ou spend at the website in the past 6	months?
	\$0	\$1 - \$50
	\$0 \$51 - \$100	\$101 - \$150
		greater than \$200
	\$0	\$1 - \$50
	\$51 - \$100	\$101 - \$150
		\$101 - \$150 greater than \$200
Out of every 10 pwebsite?		greater than \$200
	\$151 - \$200 ourchases you make online, how man	greater than \$200 my purchases are made at the
	\$151 - \$200 ourchases you make online, how man	greater than \$200
	\$151 - \$200 ourchases you make online, how man 0 3-4 purchases	greater than \$200 y purchases are made at th 1-2 purchases

\$0	\$1 -	
\$51 - \$100	\$10	1 - \$150
\$151 - \$200	grea	ter than \$200
Gender:	Male	Female
Year of birth:		
Age:		
Perceived age: (Whice	-	best describes the age you feel)
		Generation Y (born 1985-1999)
		n X (born 1965-1984)
	Baby Boom	
	Grey Hair	(born before 1946)
Ethnicity:	African An	nerican Asian
	Caucasian	
	Hispanic/Latino	
	Other (plea	se specify)
What is your annual g	gross income?	
What is your employ		employed full-time
employed part-time	not employ	
What is your annual l	nousehold income?	
\$0 - \$30	,000	\$30,001 - \$60,000
\$60,001	- \$90,000	\$90,001 - \$120,000
\$120,00	1 - \$150,000	\$150,001 - \$180,000
	1 - \$210,000	

APPENDIX B IRB APPROVAL

11/19/14

IRB <ori@uncg.edu>

to me, irbcorre, k_watchr

To: Laura Egeln

Cons, Apparel, and Ret Stds

From: UNCG IRB Date: 11/19/2014

RE: Notice of IRB Exemption

Exemption Category: 2. Survey, interview, public observation

Study #: 14-0466

Study Title: AN EMPIRICAL INVESTIGATION OF THE IMPACTS OF WEBSITE QUALITY ON

CONSUMER LOYALTY: A CASE OF BABY BOOMERS

This submission has been reviewed by the IRB and was determined to be exempt from further review according to the regulatory category cited above under 45 CFR 46.101(b).

Study Description:

A study that investigates perceptions of websites and shopping behaviors of individuals including satisfaction, trust and loyalty in the online distribution channel. Participants are asked to complete a survey about an apparel website that they have purchased merchandise from. The study is seeking participants born between 1946-1964 as they represent an under researched group of consumers that purchase merchandise in the online channel. An online consumer panel will be utilized to complete the study.

Regulatory and other findings:

• This research meets criteria for waiver of a signed consent form according to 45 CFR 46.117(c)(2).

Investigator's Responsibilities

Please be aware that any changes to your protocol must be reviewed by the IRB prior to being implemented. Please utilize the most recent and approved version of your consent

form/information sheet when enrolling participants. The IRB will maintain records for this study for three years from the date of the original determination of exempt status.

Signed letters, along with stamped copies of consent forms and other recruitment materials will be scanned to you in a separate email. **Stamped consent forms must be used unless the IRB has given you approval to waive this requirement.** Please notify the ORI office immediately if you have an issue with the stamped consents forms.

Please be aware that valid human subjects training and signed statements of confidentiality for all members of research team need to be kept on file with the lead investigator. Please note that you will also need to remain in compliance with the university "Access To and Retention of Research Data" Policy which can be found at http://policy.uncq.edu/research data/.