

# An Empirical Investigation of the Impacts of Website Quality on Consumer Loyalty: A Case of Baby Boomers

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## Abstract

The purposes of the study seek to 1) examine the association 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 association between consumer satisfaction, trust, and consumer loyalty. Data were collected via a self-administered questionnaire from an online panel called *Amazon Mechanical Turk (mturk.com)*. The study's final sample consisted of 188 responses.

To test all hypothesis relationships, we followed a two step structural equation modeling approach. Results revealed that system quality dimension (web appearance and interactivity) did not positive 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

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overall perceive 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 impact 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 direction are addressed.

**Keywords:** Website Quality, Consumer Satisfaction, Trust, Loyalty, Baby Boomers

## Introduction

Online shopping in the U.S. has become increasingly popular with sales of USD 373.4 billion for 2020, an increase of 21% as compared to 2018 (www.statista.com). Today's online retailing presents new challenges and continually change the way customers purchase merchandise. Researchers have stated 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 (Doherty & Ellis-Chadwick, 2010). 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, images, and 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.

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. 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. 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. It is interesting to note that 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, born between 1946-1964, is not well understood. The baby boomer generational cohort is currently the largest cohort in the U.S. and is predicted that in 2030, there will be about 60 million baby boomers (Colby & Ortman, 2014). 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, Ma, & Halepete, 2005).

Apparel was chosen as a context in the study because of its utilitarian and hedonic functions. In addition, the U.S.'s online apparel sales reached USD 102.5 million in 2019 and are expected to rise to more than USD 200 million by 2030 (Shahbandeh, 2020). Thus, the purposes of the study are to propose and empirically examine an integrative model of consumer loyalty within an apparel online shopping context with baby boomer online users. The specific research objectives guiding the study are to examine the associations between website quality and overall perceived website quality; to examine the associations among overall perceived website quality, consumer satisfaction, and trust; and to examine the associations among consumer satisfaction, trust, and consumer loyalty.

## Literature Review and Hypotheses Development

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. In addition, processing speed and system availability are also important elements associated with the interactivity of the website (Chiou, Lin, & Peng, 2010). Thus, we hypothesize that:

*H1: Overall perceived website quality will be influenced by a) web appearance and b) interactivity dimensions of system 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, Andersen, and Vatrpu (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, several studies have reported that information quality has a direct, positive relationship to overall perceived website quality (Jones & Kim, 2010; Kuan, Bock, & Vathanophas, 2008). 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. The concept of transactional security is included in more current studies involving information quality (Chang, Cheung, & Lai, 2005). Transactional security is necessary to complete the purchase process online and consumers will evaluate a website for transactional security. Therefore, we propose that:

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

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, Flavian, &

Guinaliu, 2007). Fulfillment and responsiveness indicate that an actual purchase has taken place and that a customer can evaluate the after purchase experience. Also, 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. Hence, we propose that:

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

Overall perceived website quality is defined as the overall perception of how a user evaluates a website (Aladwani & Palvia, 2002). 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. 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. Zhou, Lu, and Wang (2009) found that website quality has a significant positive effect on satisfaction. Therefore, it is expected that:

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

Corbitt, Thanasankit, and Yi (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. 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. Van Iwaarden, Van Der Wiele, Ball, and Millen (2004) concluded that customers who purchase from a website want the website to be trustworthy. Similarly, Flavian, Guinaliu, and Gurrea (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. Thus, it is hypothesized that:

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

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. Zhou et al. (2009) concluded that consumer satisfaction significantly affects their trust of a website. 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, Bagchi, & Kirs, 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.*

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. Friedman, Brown, and Taran (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. Bai, Law, and Wen (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. 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.*

Tsao and Hsieh (2012) also found that customers are only willing to spread positive eWOM when they trust the company. 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. Pizzutti and Fernandes (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. Zhou et al. (2009) contended that when initial trust is built on the website, the customer will purchase the product from the website. Kim, Ferrin, and Rao (2008) reported that consumer trust has a strong positive effect on the intention to purchase. 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.*



## Methodology

### Instrument and Measures

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 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

Scales were selected from a review of literature and are found to have satisfactory levels of reliability (Cronbach's  $\alpha$  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.

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 several studies (e.g., 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 and interactivity scales were adapted from Aladwani and Palvia (2002) and Kim and Stoel (2004). Second, the information quality of a website is conceptualized as consisting of two sub-dimensions in the current study: informativeness and security. Informativeness and security scales were adapted from Hausman and Siekpe (2009) and Kim and Stoel (2004). 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 and responsiveness scales were adapted from Wolfinbarger and Gilly (2003). Overall perceived website quality scale was adapted from Yoo and Donthu (2001). Satisfaction was adapted from Bai et al. (2008) while trust was adapted from McKnight, Choudhury, and Kacmar (2002). The current study conceptualizes loyalty as a tri-dimensional construct, consisting of word-of-mouth (WOM), share of wallet, and repatronage intention and scales assessing all three dimensions of loyalty were adapted from previous studies (i.e., Hsieh & Tsao, 2014; Hur, Ko, & Valacich, 2011; Pizzutti & Fernandes, 2010). 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, and (8) annual household income. General questions related to frequency of online browsing and actual online purchase were assessed using open-ended questions. The qualifying survey captured age and online apparel purchase behavior.

### Sample and Data Collection Procedures

The population of interest is consumers aged 50-68 years old. Furthermore, the participants were individuals who self-identify as baby boomers and had 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 consisted of panel

members who agreed to complete human intelligence tasks (HIT) that are requested by requestor. Researchers state that online panels are commonly used to reach participants that meet certain requirements (Grohol, 2011). 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)* had made it an option for academic research that has been widely used (Grohol, 2011). Several 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 (Paolacci, Chandler, & Ipeirotis, 2010).

With IRB approval, the structured survey was prepared and available through *Qualtrics*, an online survey application. 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). 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. 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.

## Results

### 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?”). A total of 1,096 *Mturk* participants responded to the qualification survey. Of those, however, only 188 responses (17.15%) met these two criteria mentioned earlier (i.e., bought online apparel in the last six months and were born between 1946 and 1964), then were asked to participate in the final survey.

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%), and Asian and Hispanic or Latino (6% for both groups). Results revealed that 83% of participants indicated their perceived age to be baby boomer. 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. In terms of 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. 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%).

### Measurement and Structural Models

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. The final CFA results revealed that the 39-items,

12-constructs model showed an improved fit over the original measurement model ( $\chi^2 = 1761.90$ ,  $df = 713$ ,  $p < .001$ ,  $\chi^2/df = 2.47$ ,  $RMSEA = 0.09$ ,  $CFI = 0.94$ ,  $NFI = 0.90$ , and  $TLI = 0.93$  (see Table 1). The chi-square statistic was also significant at the 0.001 level. 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. In addition, the value of RMSEA is above the minimum value of 0.05 to 0.08.

### Assessment of Validity and Reliability

Table 1 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. To examine discriminant 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. 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 a composite reliability threshold of 0.7 or greater is recommended, thereby indicating reliable scales employed in the study.

After the measurement model was confirmed, structural equation modeling was next performed to test all hypothesized relationships. The model fit statistics revealed  $\chi^2 = 1766.33$ ,  $df = 674$ ,  $p < .001$ ,  $\chi^2/df = 2.62$ ,  $RMSEA = 0.09$ ,  $CFI = 0.92$ ,  $NFI = 0.89$ , and  $TLI = 0.91$ , suggesting that the hypothesized structural relationships fit the data satisfactorily (see Figure 1).

Table 1 Measurement Model

Construct/Indicators		Factor Loadings (t-values)	
System Quality: Web Appearance $\xi_1$ (3 items); CR = 0.86; AVE = 0.67			
X1	The website looks organized.	0.82***	(7.17)
X2	The website is visually appealing.	0.81***	(7.22)
X3	The display pages within the website are easy to read.	0.83***	(6.97)
System Quality: Interactivity $\xi_2$ (5 items); CR = 0.87; AVE = 0.58			
X4	The website looks secured for carrying out transactions (e.g. uses SSL, digital certificates, etc.).	0.71***	(8.47)
X5	The website looks easy to navigate.	0.82***	(7.61)
X6	The website has adequate or effective search functions.	0.86***	(6.79)
X7	The website is always up and available.	0.79***	(7.88)
X8	The website has valid links (hyperlinks).	0.58***	(8.93)
Information Quality: Informativeness $\xi_3$ (3 items); CR = 0.83; AVE = 0.61			
X9	The content of the website is concise.	0.77***	(7.28)
X10	The content of the website is accurate.	0.83***	(6.33)
X11	The website adequately meets my information needs.	0.75***	(7.52)
Information Quality: Security $\xi_4$ (4 items); CR = 0.88; AVE = 0.65			
X12	My transactions are safe with this website.	0.87***	(6.17)
X13	The website has adequate security features.	0.88***	(6.06)
X14	The website keeps my personal information safe.	0.77***	(7.93)
X15	The website protects information about my credit card.	0.69***	(8.50)

**Table 1** (continued)

Construct/Indicators		Factor Loadings (t-values)	
Service Quality: Fulfillment/Reliability $\xi_5$ (3 items); CR = 0.82; AVE = 0.62			
X16	The product that came was represented accurately by the website.	0.86***	(4.82)
X17	The product is delivered by the time promised by the company.	0.91***	(3.27)
X18	The company makes items available for delivery within a suitable time frame.	0.54***	(8.88)
Service Quality: Responsiveness $\xi_6$ (7 items); CR = 0.88; AVE = 0.52			
X19	It is easy to find contact information on the website (e.g., e-mail addresses, phone numbers, etc.).	0.61***	(8.75)
X20	It is easy to find information related to customers' policies on the website (e.g., privacy and dispute details).	0.60***	(8.78)
X21	The company is willing and ready to respond to customer service needs.	0.81***	(7.39)
X22	When I have a problem the company shows a sincere interest in solving it.	0.83***	(7.18)
X23	Inquiries are answered promptly.	0.82***	(7.29)
X24	The company provides me with convenient options for returning items.	0.64***	(8.66)
X25	The website handles product returns well.	0.68***	(8.50)

Table 1 (continued)

Construct/Indicators		Factor Loadings (t-values)	
Overall Perceived Website Quality $\eta_1$ (5 items); CR = 0.90; AVE = 0.65			
Y1	Overall, the website worked very well technically.	0.78***	(8.27)
Y2	Visually, the website resembled other sites I think highly of.	0.67***	(8.79)
Y3	The website was simple to navigate.	0.83***	(7.80)
Y4	On the website, it was easy to find the information I wanted.	0.88***	(7.03)
Y5	The website is of high quality.	0.84***	(7.63)
Satisfaction $\eta_2$ (1 item)			
Y6	I am satisfied with my decision to visit the website.	0.90***	
Trust $\eta_3$ (3 items); CR = 0.89; AVE = 0.73			
Y7	I feel good about how things go when I do purchase or browse on this website.	0.87***	(6.52)
Y8	I always feel confident that I can rely on this website to do business when I interact with them.	0.89***	(5.93)
Y9	In general, I feel that this website is competent at serving its customers.	0.81***	(7.60)
Loyalty: WOM $\eta_4$ (2 items); CR = 0.81; AVE = 0.67			
Y10	I am likely to encourage friends and others to do business with this site.	0.77***	(7.60)
Y11	I would say positive things about this website to other people.	0.87***	(5.07)



Table 1 (continued)

Construct/Indicators		Factor Loadings (t-values)	
Loyalty: Share of Wallet $\eta 5$ (2 items); CR = 0.87; AVE = 0.77			
Y12	Out of every \$500 you spend online, how many dollars do you spend at this website?	0.82***	(7.27)
Y13	Out of every 10 purchases you make online, how many purchases are made at this website?	0.93***	(3.62)
Loyalty: Repatronage Intention $\eta 6$ (1 item)			
Y14	I am likely to purchase from apparel (clothing) websites within the next six months.	0.89***	
Model Fit Indices			
$\chi^2$		1761.90***	
df		713	
$\chi^2/df$		2.47	
RMSEA		0.09	
CFI		0.94	
NFI		0.90	
TLI		0.93	
Note: * p < .05; *** p < .001			

### Test of Hypotheses

H1 proposed that overall perceived website quality would be influenced by a) web appearance and b) interactivity dimensions of system quality. Results showed that H1 was not supported.

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. That is, informativeness did positively influence overall perceived website quality ( $\gamma_{13} = 0.56$ ,  $t\text{-value} = 5.88^{***}$ ). In addition, security did not positively influence overall perceived website quality. Thus, H2 was partially supported.

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. That is, while responsiveness did positively influence overall perceived website quality ( $\gamma_{16} = 0.19$ ,  $t\text{-value} = 2.23^{**}$ ), fulfillment did not positively influence overall perceived website quality. Thus, H3 was also partially supported.

H4 proposed that consumer satisfaction would be influenced by overall perceived website quality. Results showed that overall perceived website quality significantly affected satisfaction. That is, overall perceived website quality did positively influence satisfaction ( $\beta_{21} = 0.66$ ,  $t\text{-value} = 7.05^{***}$ ), supporting H4.

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

H6 proposed that consumer trust would be influenced by satisfaction. Results showed that satisfaction did not significantly affect trust. Thus, H6 was not supported.

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. That is, satisfaction positively influenced WOM ( $\beta_{42} = 0.31$ ,  $t\text{-value} = 7.01^{***}$ ) and share of wallet ( $\beta_{52} = 0.38$ ,  $t\text{-value} = 4.02^{***}$ ). However, satisfaction did not positively influence repatronage intentions. Thus, H7 was partially supported.

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. That is, trust positively influenced WOM ( $\beta_{43} = 0.56$ ,  $t\text{-value} = 4.3^{***}$ ), share of wallet ( $\beta_{53} = 0.38$ ,  $t\text{-value} = 4.62^{***}$ ) and repatronage intentions ( $\beta_{63} = 0.41$ ,  $t\text{-value} = 3.77^{***}$ ). Thus, H8 was supported.

## Discussion and Conclusions

### Discussion

In answering the first objective, i.e., “examining the associations between website quality dimensions and overall perceived website quality,” findings revealed that web appearance did not positively influence overall perceived website quality, which is consistent with findings that suggest that esthetics, color, and product presentation is not significant, but customers 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. Zhou et al. (2009) 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. To explain the relationship between overall perceived website quality and interactivity, our results indicated that the interactivity dimension of system quality did not significantly impact overall perceived website quality. This result contradicts previous research by Manganari, Siomkos, Rigopoulou, and Vrechopoulos (2011) who 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. The current study identified informativeness and security as the two dimensions of information quality.

Our results showed that informativeness did positively influence overall perceived website quality. 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. For the purposes of this study, service quality was measured by the dimensions of fulfillment and responsiveness. Results of this study showed that the dimension of fulfillment did not significantly affect overall perceived website quality. This finding suggests that customers expect fulfillment on their order as

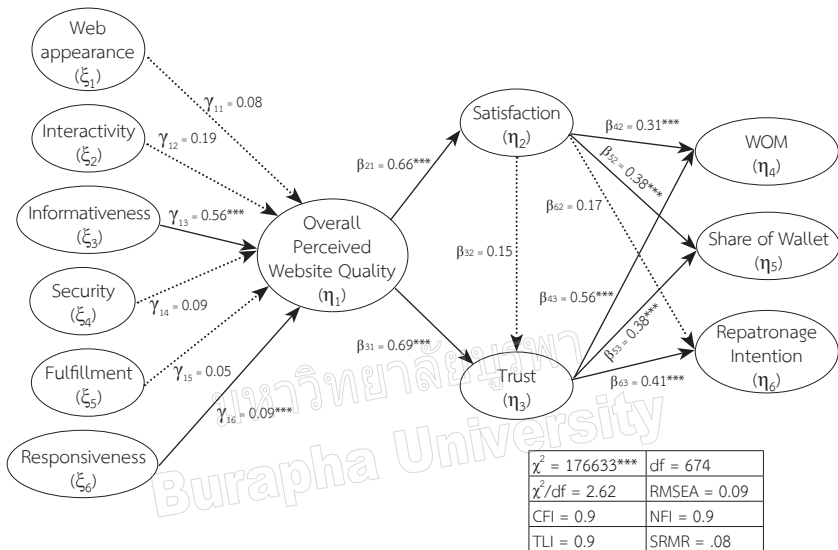
a minimum. Therefore, the lack of fulfillment is likely to negatively impact overall perceived website quality. These findings contradict Bauer, Falk, and Hammerschmidt (2006) which state that customers' expectations of fulfillment are important in the evaluation of quality service. This finding is consistent with Xing and Grant (2006), 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.

In answering the second objective, i.e., "examining the relationship among overall perceived website quality, consumer satisfaction, and trust," our results showed that overall perceived website quality significantly affected satisfaction. 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, Oh, and Gregoire (2003) concluded that website quality is a factor of satisfaction, which is consistent with the findings of this study. Study results also revealed that overall perceived website quality significantly affected trust. 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, Souiden, and Ladhari (2013) concluded that e-trust as captured through the dimensions of credibility and benevolence have a positive impact on website attitude. The current study also found that satisfaction was not an antecedent of trust. 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.

In answering the third objective, i.e., "examining the associations between consumer satisfaction, trust, and consumer loyalty," results of the study found that satisfaction positively influenced WOM. This finding is consistent with Tsao and Hsieh's (2012) study in that consumers are likely to spread positive WOM about the stores when they are satisfied with their shopping experience. Results showed that satisfaction significantly affected share of wallet. This finding is consistent with Keiningham, Aksoy, Malthouse, Lariviere, and Buoye (2014) study in that transaction specific satisfaction has an impact on share of wallet. Results of the study also revealed that satisfaction did not positively influence repatronage intentions. This finding contradicts findings that state that satisfaction positively impacted revisiting a website and repurchase intentions (Dholakia & Zhao, 2010). 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.

**Figure 1** Model Predicting Loyalty



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

In terms of relationship between loyalty and trust, our results showed that trust significantly affected share of wallet. 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 (Perkins-Munn, Aksoy, Keiningham, & Estrin, 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. We also found that repatronage intention is positively influenced by trust. This

finding is consistent with previous studies that indicate the greater the trust of the website, the greater the repurchase intentions (Pizzutti & Fernandes, 2010). 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.

## Conclusions

Driven by four different research streams: website quality (Wolfenbarger & Gilly, 2003), consumer satisfaction (Oliver, 1999), 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. Results of the studies assumed that findings would be generalizable for other generational cohorts such as the baby boomer market. 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. 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, information quality, and service quality 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. 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. 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. Toufaily et al. (2013) concluded that security is an antecedent of trust (dimensions: benevolence and credibility). 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).

In this study, overall perceived website quality was found to positively impact satisfaction and trust. 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). When a retailer establishes trust, customers will have a favorable attitude towards the website and the retailer (Toufaily et al., 2013). 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.

## Implications

### 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). 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. Also, 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. According to the State of Retailing Online 2017, 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 (National Retail Federation Foundation, 2018). 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. Satisfaction with a website is equally important for a retailer for the consumer's current behavior.

### Limitations and Future Research Directions

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*. 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. 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. 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. 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. 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. Future studies should seek to reach participants who purchase online via other data collection means to assess the general population of online users.

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