Exploring Antecedents Influencing Internet Shopping Satisfaction: The Case of the Apparel Industry

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Abstract

With Internet shopping gaining more attention and momentum, a better understanding of the online consumer is now in the forefront of most retail strategies. The growth of online retailing or Internet shopping has provided the apparel industry with additional avenues to reach the consumer. Previous research has shown that consumers' intent to purchase online is highly driven by their satisfaction. But, what variables influence e-satisfaction? After two extensive pre-test surveys, a very large sample of students and community members were used to solicit and understanding of many variables on E-satisfaction. The regression analysis results indicate Experience and Shopping Innovation had the strongest effect on E-satisfaction while all other variables Interest, Perceived Usefulness, Attitude, Tactile Importance, and Convenience are significant. Results indicate that if consumers have positive predispositions and interests toward online shopping, then they are more likely to be satisfied with the shopping outcome. From a strategic point of view, the challenge is for marketers to engage its target in order to enhance positive attitudes and maintain their interest with the product. Similarly, because consumers are becoming more familiar with online shopping, the perceived risk has perhaps been minimized. Less apprehension regarding online shopping has led to more satisfaction because of shopping innovativeness and usefulness.

Introduction

As traditional apparel retailing becomes increasingly competitive, marketers are exploring non-traditional means to reach their target markets. The growth of online retailing or Internet shopping has provided the apparel industry with additional avenues to reach the consumer (Goldsmith & Goldsmith, 2002). Online retailing uses the Internet as the medium to conduct purchases (Yu & Wu, 2007). Studies have touted the growth of on-line shopping and the growing purchases of those with Internet access (Lin & Sun, 2009). In fact, apparel products have been consistently ranked as one of the most frequently purchased items through the Internet (Seckler, 2001).

In addition of Internet retailing, apparel customization has also become another means to effectively provide some spike when sales levels off. Apparel customization requires manufacturers and retailers to create and develop specific products for niche categories. These niche product categories or sub-categories offer many unique growth opportunities and strategies for a mature market like the apparel industry (Parrish et al., 2006b).

One of the drivers for the growth of Internet shopping is satisfaction [with online shopping]. There is a plethora of studies that provide empirical support to the relationship between satisfaction and purchase intention (Lin & Sun, 2009; George, 2002; Fenech & O'Cass, 2001). Meanwhile, studies on satisfaction specific to niche markets have been sporadic.

One major theoretical model often utilized as the platform for online retail satisfaction studies is the Theory of Planned Behavior (TPB) (Ajzen, 1991). This model focuses on a person's intention to perform a specific behavior based on his/her attitude [toward that specific behavior along] with the subjective norms and/or held by that person's associates (Ajzen 1991). Among other authors, Yoh et al. (2003) and George (2002) have applied Ajzen's theory to online shopping.

In addition to Ajzen's model, other researchers have looked into the issue of the consumer purchase process (Butler & Peppard, 1998; Walczuch & Lundgren, 2004; Kim et al., 2008). They have found that consumers' attitudes and beliefs regarding convenience as well as security concerns [shaped during the online purchase process] have significant effects on their intention to purchase online (Laohapensang, 2009; Limayem et al., 2000). Shanker et al. (2003) have shown that services provided during and following the purchase are essential to e-consumers' repeat purchases.

A number of studies have also documented the significant role of website technology factors and service quality in influencing customer e-satisfaction and e-loyalty (Szymanski & Hise, 2000; Devaraj et al., 2002; Anderson & Srinivasan, 2003; Ribbink et al., 2004; Shih, 2004; Flavian et al., 2006). For many consumers, technology is seen as the principal barrier to using the Internet for online shopping. Online technology is seen as the principal barrier to using the Internet for online shopping. Online technology is seen as the principal barrier to using the Internet for online shopping. Using the factor having most influence on the intention to shop. (Laohapensang, 2009).

Since the online retailing trend is expected to continue in the coming years and customized apparel growth is becoming more evident, it would be interesting to examine consumers' behaviors within the context of Internet shopping and niche apparel products. That is, *what factors affect online shoppers' satisfaction of niche apparel products?*

The remainder of this paper consists of four major sections. The next section provides the theoretical foundation for hypotheses generation. The second section discusses the methodology used. The results of the statistical analyses are then presented followed by a discussion of the findings, limitations and direction for future research and managerial implications.

Literature Review

In order for consumers to remain loyal, retailers have to maintain high online shopping satisfaction (henceforth esatisfaction) (Szymanski & Hise, 2000). This is because e-satisfaction has been found to affect intent to make online purchases, which in turn impacts actual purchasing behaviors (George, 2002).

Customer satisfaction in the context of online retailing is now receiving much attention in the extant literature. While there are hundreds of studies on the antecedents of satisfaction in classical or traditional [storefront] purchasing contexts (Szymanski & Hise, 2000), there is still much to be explored on e-satisfaction. Goldsmith and Goldsmith (2002) suggest that online buyers are very different from in-store counterparts. These consumers adopt online shopping only if there is a high level of satisfaction with Internet shopping.

Satisfaction is a post experience activity measurement index dealing with customer's assessment of past purchases and shopping experiences (Lin & Sun, 2009). E-satisfaction specifically deals with satisfaction emanating from online purchases and experiences. For the purposes of this study, e-satisfaction relates to the level of Internet shopping satisfaction.

<u>Attitudes</u>. Research on e-satisfaction has looked into the impact of attitude. In particular, several studies have utilized the Theory of Reasoned Action to explore the general effects of attitudes online purchasing (Yu & Wu, 2007). For example, Yoh et al. (2003) proposed that psychological factors such as attitudes, social normative factors, and prior experience explain consumers' intention to purchase apparel products via the Internet. They suggest that behavior intentions are driven by two underlying determinants: (1) attitude toward the object or behavior such as Internet shopping, and (2) an individual's perception of normative social pressure to perform or not perform the particular behavior. This is consistent with Fishbein and Ajzen's (1975) Theory of Reasoned Action.

There have been many ways of conceptualizing attitudes. Attitude, in the extant literature, generally focuses on a predisposition to respond favorably or unfavorably to an object, event or other aspect of one's surroundings (Ajzen 1988). Kwon et al. (1991) and Schmid (1999) found that individuals tend to have favorable thoughts and actions toward objects with which they have knowledge and involvement, and this is true of Internet apparel shopping (Yoh et al, 2003). Authors such as Fenech and O'Cass (2001) and Helander and Khalid (2000) have provided significant empirical support that positive attitude towards Internet retailing impacts consumers' use of online shopping and thus satisfaction. Therefore, Internet users' with positive attitudes toward online shopping are more likely to have higher levels of shopping satisfaction.

H1: Positive attitudes toward Internet apparel shopping is positively related to e-satisfaction.

<u>Interest</u>. If consumers hold a positive attitude towards Internet apparel shopping, then it would be reasonable to expect that they are also quite interested in the said activity. However, consumers vary in their levels of involvement in online shopping. Those who have previously bought apparel online are probably more familiar with online shopping. This familiarity stems from the consumer's interest in this product category. The high level of interest in apparel shopping will booster a consumer's confidence and enhance satisfaction with online shopping (Goldsmith & Goldsmith, 2002). In other words, those consumers generally interested in shopping apparel products online will be more satisfied with the buying activity.

H2: Interest in Internet apparel shopping is positively related to e-satisfaction.

Desire for <u>Convenience</u>. The issue of convenience has been associated with the trial and adoption of non-store shopping environments (Berkowitz et al. 1979. Darian (1987) suggested that there were five dimensions of convenience for in-home [or non-store] shoppers, including reducing the time spent on shopping, providing flexibility in the timing of shopping, saving physical effort of visiting a traditional store, reducing aggravation and providing the opportunities for impulse buying in response to advertisements received while at home. These dimensions are associated with varying levels of (non-store) satisfaction (Darian, 1987). Croft (1998) and Shim and Drake (1990) have indicated that convenience is the key driver for potential users of non-store non-store purchase environments, such as mail order catalogs.

The majority of consumers find e-tailing appealing because of the convenience of it offers (Parrish et al., 2006b). Shoppers are able to shop in their own pace without stepping foot inside a store, thus fulfilling some of the key aspects of non-store shopping. Because shoppers find little pressure when online shopping, researchers have found that positive perceptions of convenience and levels of shopping satisfaction are strongly linked together (Szymanski & Hise, 2000).

H3: Perceptions of convenience with Internet apparel shopping is positively related to e-satisfaction.

<u>Experience</u>. Experience is an important factor in making online purchases (George, 20002; Hoffman et al., 1999). Yoh et al. (2003) analyzed experience based on various types of buying behaviors such as purchasing of gifts, shopping on the Internet, and usage of the Internet. In each case, it was found that experience was related to higher levels of buying intention behavior. Goldsmith and Goldsmith (2002) provide empirical support that consumers with more online apparel buying experience are more involved with the product category. This results in higher frequency in online purchases. Higher frequency increases the likelihood that these consumers have higher levels of shopping satisfaction.

H4: Prior experience with Internet shopping is positively related to e-satisfaction.

<u>Shopping Innovation</u>. Identifying the importance of shopping innovation on consumer satisfaction has been explored in prior studies by many authors such as Shim and Drake (1990), Palendran and Burton (1998) as well as Fenech and O'Cass (2001). Shim and Drake (1990) illustrated that potential users of non-store shopping environments were more inclined to have use other non-store shopping environments. This reduces the consumer's inhibition towards the new shopping environment, i.e., online environment (Fenech and O'Cass, 2001). Shopping innovativeness has been associated with the perceived risk relating to the information gathered about the online retailer and the relatively new experience of conducting the purchase activity online. Increased shopping innovativeness reduces perceived risk. As a result, more shopping innovation enhances retailer trust which subsequently impacts satisfaction (Fenech and O'Cass, 2001). In keeping with these previous authors' findings, we suggest:

H5. Shopping innovativeness toward Internet apparel shopping is positively related to e-satisfaction.

<u>Perceived Usefulness</u>. The shopping experience is often evaluated according to the consumer's perceived value or usefulness (Fenech and O'Cass, 2001). An individual's perceived usefulness for online shopping has been shown to influence adoption of e-tailing environments (Teo Lim & Lai, 1999). Davis (1989) has suggested that if an online shopper believes that the online system will enhance the performance of a task, their perceived usefulness is likely to be higher. As a result, they are more likely to hold a more positive attitude towards the system than non-shoppers. Therefore, it can be anticipated that if the consumer has a higher perceived usefulness for online shopping, he/she user can be expected to have a greater likelihood of adopting the online retailing environment for future purchases.

H6: Perceived usefulness for Internet apparel shopping is positively related to e-satisfaction.

<u>Tactile Importance</u>. Some shoppers want the opportunity to handle products because it enhances the shopping experience. The ability to feel, see, smell, taste and/or hear the product arouse tactile sensations. This may be especially true for consumers who buy a disproportional share of apparel or spend a disproportional amount of time shopping in the product category (Goldsmith and Goldsmith, 2002). For some shoppers, when there is a high degree uncertainty about the product and its features, the absence of tactile experiences could render the shopping activity less pleasurable. Since online shopping does not allow for a full range of tactile experiences, lower e-satisfaction can be expected.

H7. Tactile importance toward apparel shopping is negatively related to e-satisfaction.

The resulting hypotheses presented above are shown in Figure 1 for a regression model below. Y = a + b X + e





Methodology

Questionnaire Development

A survey was adapted from Yoh et al. (2003) and modified for the customized hospital gown (niche) subcategory. An initial version of the questionnaire was pilot-tested with 30 students in a marketing research class and 25 adults familiar with the product category for readability, ease of use, and clarity. After making their suggested changes, the revised questionnaire was again field-tested by requesting student volunteers to complete it. The final questionnaire contained a wide range of questions including demographic questions relating to gender sex, age, ethnicity, occupation and educational level. Other questions asked about the participants' general Internet and shopping experiences. The questions on the participants' shopping experiences contained rating scales to measure their in-store and online purchasing behavior as well as likelihood of future online purchases. The survey was self administered through a web survey service known as Survey Monkey at www.surveymonkey.com.

Attitude: The measure of "attitude towards using" the Web for retailing consisted of a 7-point bipolar semantic differential scale anchored by negative (1) and positive (7). This was adopted from Yoh et al. (2003).

Interest: For a global interest measure, a 7-point semantic differential item captured interest from low to high. This scale was adopted from Yoh et al (2003).

Convenience: Internet users were asked to assess the level of convenience attributable to their Internet shopping experience. It was captured on a 7-point scale from inconvenient (1) to convenient (7). This scale was adopted from Yoh et al (2003).

Experience: Prior experience with various shopping methods was measured on a 5-point scale. The shopping methods were Department/Specialty Stores, Internet, Mail Order/Catalog, Discount Stores/Outlet Malls, and TV shopping Channels. This scale was adopted from Fenech and O'Cass (2001).

Shopping Innovativeness: Internet users were asked what retailing environments they used in the past six months, including brick and mortar retail stores, TV shopping, and mail order. The number of shopping environments were captured together to form a scale of shopping innovativeness ranging from 1-7. This was adopted from Fenech and O'Cass (2001).

Perceived Usefulness: Perceived usefulness was used to measure the Internet user's belief regarding the usefulness of the Internet for retail shopping. The scale consisted of three items with a seven-point unipolar Likert.

Tactile Importance: The tactile importance was measured on a 7-point Likert scale based on Fishbein and Ajzen (1975). The scale had strongly disagree (1) and strongly agree (7) as endpoints.

E-satisfaction: One 7-point highly likely/unlikely bipolar scale was developed by the researchers to capture Internet satisfaction. This was adopted from Yoh et al. (2003).

Sample

Undergraduate and graduate students as well as adults in the community were contacted for a very large convenience sample. The survey collected 883 observations of which 786 observations were useable. Demographic information on the survey respondents is presented in Table 1. Although a non-probability sample was used, it was ideal for a niche category of hospital gowns to ensure the sample's familiarity with the product. With the use of the snowballing technique, sampling procedures are used to select additional respondents on the basis of referrals from the initial respondents thus dramatically reducing our search costs. Subsequent respondents were selected based on referrals. This process is carried out in waves by obtaining referrals, thus leading to a "snowballing" effect (Malhorta, 1999). Using referrals such as this increases the likelihood that the sample will have demographic and psychographic characteristics that are more similar to the persons referring than would by chance. Therefore, a major advantage of snowballing is that it substantially increases the possibility of locating the desired characteristic in the population. It also results in relatively low sampling variance and costs.

The respondents were representative of those that would be interested in the niche category - generally highly educated and experienced with the Internet. This is consistent with findings in previous research on Internet shoppers (Roman 2010, Yoh et al. 2003).

Sample Size : 768			
Variable	Frequency	%	
Gender			
Male	220	27.99	
Female	566	72.01	
Age			
18-24	282	35.88	
25-34	211	26.84	
35-44	141	17.94	
45-54	108	13.74	
55-64	35	4.45	
65-74	5	0.64	
Household Income (per year)			
<\$25,000	358	45.55	
\$25,000-\$49,999	183	23.28	
\$50,000-\$74,999	114	14.5	
\$75,000-\$99,999	70	8.91	
\$100,000 or more	61	7.76	
Ethnicity			
African-American	78	9.92	
Asian	144	18.32	
Caucasian	501	63.74	
Hispanic	38	4.83	
Other	25	3.18	

Table 1: Study Subject Demographics

Results

The trends in the market place reinforce the importance in investigating a model on factors influencing consumers' e-satisfaction. This model, Figure 1, can then serve as a springboard for empirically testing the proposed hypotheses as well as fill in some of the gaps in the extant literature. Table 2 illustrates the regression analysis based on the E-satisfaction model shown in Figure 1. As can be seen in this table, all of the variables show significance at some level. This is expected given the importance of these antecedents in illustrating and understanding the nature of E-satisfaction.

The major research questions were to identify the antecedent shopping characteristics and their relationship to Esatisfaction. It was estimated based on previous research (Yoh et al. 2003), that the following characteristics would impact Internet shoppers E-satisfaction: Attitude, Interest, Experience, Shopping Innovativeness, Perceived Usefulness, Convenience, and Tactile Importance. This research was examined via regression analysis with the model's variables entered into the regression

 $E-Satisfaction = c + AttitudeX_1 + InterestX_2 + ExperienceX_3 + ShoppingImovationX_4 +$ PerceivedUsefuln $essX_5$ + Convenien exX_6 + TactileIm por tan ceX_7 + e

simultaneously. The analysis indicated that 60.1 percent of the variance in E-satisfaction was explained by the model's independent variables, with a significant F-value of 176.63 (p<.001).

The regression analysis results shown in Table 2 indicates that all variables were significant. Experience and Shopping Innovation had the strongest effect on E-satisfaction having beta weights of .647 and .275 respectively, with both being significant at p<.01. Interest, Perceived Usefulness, and Attitude were also significant with beta weights of .292, .196, and .185, respectively, with both being significant at p<.01 also.

Tactile Importance and Convenience are significant at p<.05 with beta weights of -.073, and -.106. As expected most variables had the model's hypothesized direction of the effect. However, contrary to what was expected, the direction and strength of Convenience was not captured in the data. The assessment of H1-H7, based on the conducted regression analysis using the identified antecedents clearly supports 6 of the hypotheses. As shown in Table 2, all the antecedent variables were found to significantly impact satisfaction. The influence of the antecedent variables on e-satisfaction were in keeping with the proposed hypotheses except for the proposed positive relationship between convenience and satisfaction (H3). Instead, a negative relationship was found (p<.05).

Dependent Variable: E-satisfaction			
	Coefficients		
	В	t	Sig
Constant	-1.152	-4.169	**
Interest	0.292	4.316	**
Perceived Usefulness	0.196	3.241	**
Convenience	-0.106	-2.461	*
Experience	0.647	16.399	**
Shopping Innovation	0.275	5.703	**
Tactile Importance	-0.073	-2.178	*
Attitude	0.185	3.015	**
F	176.633		***
R Square	0.601		
Adjusted R Square	0.598		

 Table 2: Regression with E-satisfaction as Dependent Variable

Footnote:

p < .05** p< .01 *** p< .001

Discussion

The premise of this study starts with the question, *what factors affect online shoppers' satisfaction of niche apparel products?* Based on the findings of this research, the graphical model presented in Figure 1 and the corresponding hypothesized paths (H1-H7) were mostly supported. Consistent with the findings of Yoh et al. (2003), our results indicate that the Fishbein and Ajzen (1975) Theory of Reasoned Action coupled with variables relating to experience, innovation and usefulness explained a large portion of consumers' satisfaction in Internet apparel shopping.

This paper examined constructs that were thought to impact on Internet users' adoption of niche web retailing and their perception of product types purchased via the Web. The results indicate that indeed Experience and Shopping Innovation significantly affect the adoption of Web retailing by shoppers. Although recent research has been directed to Web retailing; there has been little research to examine issues related to consumer characteristics on niche product category with consumers knowledgeable in the category such as this.

Internet shopping is an alternative to the traditional in-store environment. If consumers have positive predispositions and interests toward online shopping, then they are more likely to be satisfied with the shopping outcome. From a strategic point of view, the challenge is for marketers to engage its target in order to enhance positive attitudes and maintain their interest with the product.

As expected, consumers with online buying experience are generally more satisfied. Since a surge in online buying has occurred during the past few years, the familiarity and experience consumers now have will prove to be beneficial to online retailers. From a customer relationship management perspective, this will help in developing long-term relationships with customers when satisfaction is prevalent.

Similarly, because consumers are becoming more familiar with online shopping, the perceived risk has perhaps been minimized. Less apprehension regarding online shopping has led to more satisfaction because of shopping innovativeness and usefulness.

Unfortunately, despite many technology advances in online product presentation, the ability to expose consumers' senses to various aspects of the product is still limited. Failure to offer a wide range of tactile experience could have an adverse effect on satisfaction. As a result, online retailers are encouraged to incorporate tactile-enhancing features in their apparel websites such as colorful graphics, virtual model, pleasant audio effects, etc.

Surprisingly, a negative effect of convenience on satisfaction was found. One plausible explanation for this finding may be related to the context of the niche product utilized in this study. That is, when dealing with a specialty product like hospital gowns, convenience may not be as important as it is to get the right customized product.

Implications

The findings of this study help to better understand the nature of the Internet shoppers' important characteristics and that these shoppers are in the most advantageous position to take up the Internet as a retail medium. By examining these antecedents for retail shopping, we are in a position to understand key drivers for adoption and key barriers that impair adoption in niche product categories.

The study has illustrated the benefit of incorporating constructs from the MIS field to examine retailing opportunities. Specifically, that Experience and Shopping Innovation are strong predictors of web retailing in an Internet mediated environment. As new retailing opportunities, such as wireless shipping, are offered to shoppers, of current technology, (i.e. smartphones), marketers may use this model and key antecedents to predict E-satisfaction which is an important determinant of purchase behavior.

Limitations and Future Research

Recommendations for future research are based on the findings and limitations of the research. The proposed model could be further developed for other niche product categories. This additional testing could lead to further generalizability. The sampling method used can potentially be problematic because the respondents were not randomly selected. Instead, the survey was distributed via a snowballing technique which does not allow for the careful selection of the sample. As a result, the resulting sample for the survey may not have been the relevant target group.

In the future, research could be done to further target those who have been and/or have an affiliation with hospital patients. This will allow a better sample selection and thus, would probably provide better responses and survey results.

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