

The influence of identity characteristics on E-Shopping enjoyment and E-Loyalty among women online shoppers

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Abstract

This paper extends a previous study that examined the role of enjoyment on the development of e-Loyalty by considering the role of race, income, and education on the enjoyment and development of e-Loyalty in women online shoppers. The goal of this research was to develop a better understanding of the online consumer by investigating women in relation to their e-commerce behaviors and perceptions. By looking at the intersectionality of race, income, and education level, it is a goal to gain a better understanding of the complexities of women as consumers. After completing a quantitative analysis of the data, it was found that the intersectionality of the demographic dimensions of Race, Income, and Education were not found to have a significant moderating impact on the enjoyment of an online shopping experience and the development of E-Loyalty in women online shoppers. This suggests that the complexity and multidimensionality of the psychographic social identification profile possibly supersedes the one-dimensional demographic identification variables in defining the traits and preferences of online shoppers, specifically women online shoppers.

Keywords: Online shopping, women, race, income, education level

INTRODUCTION

Research on gender-related attitudes toward Internet activities suggests that women are less likely to purchase online than men, and are overall less satisfied with their Internet shopping experiences [Garbarino & Strahilevitz, 2004]. According to Moss and Gunn [2005], this lack of satisfaction may be a result of website designs that are not compatible with women's design preferences. Examining customer satisfaction in women online shoppers is extremely relevant for online retailers because women's online presence is significantly increasing. According to eMarketer [Phillips, 2009], 106.3 million women use the Internet, composing 51.8% of all Internet users, with an expected increase to 115.2 million women (52.1%) in 2013. In addition, women's annual spending is also gradually increasing. Globally, women control \$20 trillion in annual consumer spending and are projected to control \$28 trillion by 2014 [Silverstein & Sayre, 2009]. Naturally, women's increased spending *should* also apply in the online context. As a result, understanding women's needs and preferences will have commercial value and increasingly, website designers will need to consider the exact elements that contribute to these perceptual differences [Cyr & Bonanni, 2005].

Thus, it is important for both academics and online retailers to understand the needs and preferences of women online shoppers to attract and retain their collectively increasing Internet purchasing presence. However, further examination of these differences and preferences is needed to fully understand the online shopping space. Prior research suggests that future investigations should place greater attention to website design elements that will be favorable to women [Cyr & Bonanni, 2005; Rosen & Purinton, 2004]. If the design and capabilities of a website appeal to online shoppers, they are more likely develop e-Loyalty [Cyr & Bonanni, 2005].

To address this issue, *author omitted* [2010] used the Social Identity Approach to Website Design to examine the influence of emotionally infused website design elements and the development of e-Loyalty in women online shoppers. In the Social Identity Approach to Website Design model, it is suggested that a woman online shopper's social identification influences her enjoyment of an online shopping experience in which prototypically defined context designed to appeal specifically to members of a particular social group is embedded. Using data collected from 322 women participants, hypothesis testing revealed that, in women online shoppers, the perception of social presence in an online retail store positively influences their enjoyment of the online shopping experience [*author omitted*, 2010]. The results also suggest that women online shoppers' enjoyment of an online shopping experience positively influences their development of e-Loyalty.

While it is important to investigate women as group in relation to e-commerce behaviors and perceptions, as the technology for the online marketplace grows and expands, the need to develop a better understanding of the online consumer is necessary. In addition, e-Commerce is a major source of revenue for retailers; therefore additional understanding of the online consumer may produce Web sites and other e-commerce technologies that are better tailored to the consumer. Therefore, an expansion of the previous study conducted by *author omitted* [2010] by exploring the factors of race, income, and education level among women to identify if these factors mitigate or influence enjoyment of e-Commerce Web sites. In addition, while gender has been identified as an important unit of analysis, especially in the retail industry, it can be acknowledged that people (women more specifically) are not mono-dimensional beings, but

are in fact dynamic and diverse creatures with a myriad of experiences, and characteristics which shape their association to and participation with technology. Based on that notion, this study will examine the Intersectionality of the factors of gender, race, income, and education level in an effort to better understand e-Commerce behaviors and avoid generalizations regarding women and technology. In doing so, it is of importance to further address the notion of the Digital Divide by developing a better understanding of the uniqueness of women through the evaluation of their multiple identity characteristics.

Race, income, and education are well-studied characteristics in the technology adoption and Digital Divide literature. The factors of income and education have been widely used to identify socio-economic status and social class in the United States and continue to be paired race, gender and age to develop a better understanding of individual behavior. Much of the research that evaluates the factors of race, income and education level are connected with beliefs about the Internet which affect the attitude of the consumer toward the Internet [Porter & Donthu, 2005]. Differing levels of participation with technology have been evaluated along the lines of race which have shown a further inequity in terms of access to the technical hardware and more recently the skills necessary to make beneficial use of the Internet. Elbert and Alston [2005] state that “disparities still exist economically, socially, ethnically, and racially. Individuals with the greatest access to digital technology are Whites and Asians/Pacific Islanders, who, on the average, have higher incomes, more education, and dual-parent households (p.1)”. However, a recent report published by the Brookings institution on Internet adoption, it was concluded that income and education levels alone are not adequate to explain the gaps in participation. Therefore, it is necessary to expand the analysis to include other demographic categories [Sutter, 2010]. Based on the report, it appears that individuals with more education and money are more likely to have access to Broadband, but that these characteristics do not fully account for the racial divide of Internet users. Therefore, more research must be done to address the gaps in access and use of technology. In this paper, the following question was investigated:

How do the factors of race, income and education influence the psychological tendencies and preferences of women online shoppers in their inclination toward revisiting or recommending an e-commerce website?

In the following sections, the existing literature on e-Commerce and e-Loyalty will be presented. Next, an overview will be provided of the methodology including the data collection and analysis techniques. Following that, the findings and discussion of the results will be presented. The paper is concluded with an explanation of the implications and limitations of this research project as well the contribution of the study and plans for future research.

LITERATURE REVIEW

E-Shopping and E-Loyalty

In recent years, researchers have begun to examine the nature of the online shopping experience. In comparison to the traditional shopping experience, online shopping is anonymous, more impersonal, and lacks face-to-face interaction, human warmth, and sociability [Cyr et al., 2007]. Buyers and sellers have no direct contact and there are few social cues available to enhance the shopping experience. As a result of this automation, encouraging consumer loyalty in online environments is a complex process.

Previous research suggests that many consumers enjoy their shopping experience because of their proximity to other shoppers and often seek to visit stores to engage in social interaction and obtain social support from other shoppers [Tauber, 1972; Westbrook & Black, 1985]. It is also believed that physical shoppers obtain pleasure from the sights, sounds, and/or smells of the traditional retail environment [Cox, Cox, & Anderson, 2005]. Ambient cues that impact the five senses have been found to be important for shoppers in the traditional shopping experience and as the intangibility of a product increases, the influence of the ambient cues on consumer evaluations grows stronger [Bitner, 1992].

Some researchers have premised that the ambient cues that impact shoppers in traditional retail environments may also be relevant in the online shopping context. Menon and Kahn [2002] found that the level of pleasure that consumers experience during online shopping episodes influence their resulting shopping behavior. In their research, Eroglu, Machleit, and Davis [2001] proposed a research model and found that the atmospheric cues of an online store, such as content and aesthetic design elements, impact the outcomes of online shopping with affective and cognitive states serving as intervening variables. Eroglu et al. [2001] also posit that the atmospherics that are inherent in an online shopping experience are likely to impact the adoption and use of a particular website in terms of satisfaction, repeat purchases and visits, and time spent in the virtual store, similar to the impact of the physical environment in a traditional retail store on various psychological and behavioral shopping outcomes.

Although the end result of an online shopping experience is largely the same as in a traditional shopping experience, obtaining a product or a service, there are major differences in the shopping environment [Roy, Dewit, & Aubert, 2001; Yoon, 2002]. In general, the differences include:

- lack of physical cues that facilitate trust (ex: physical buildings, staff/personnel);
- consumer perception of ease of loss or breach of sensitive data;
- inability to physically evaluate products, relying only on visual and auditory senses; and
- lower barrier to entry and exit for online vendors.

In the online shopping experience, transactions between online retailers and online shoppers transcend time and space. Literature refers to this separation between time and space as dis-embedding [Brynjolfsson & Smith, 2000; Giddens, 1990]. It has been presented that dis-embedding has negative consequences for consumer trust and curbs the development and growth of online shopping [Riegelsberger et al., 2003]. In order to address these negative consequences, Riegelsberger and Sasse [2001] and Riegelsberger et al. [2003] recommend a process termed virtual re-embedding where social cues such as photos, video, text, and/or speech are incorporated in online design and socialization is embedded in the online shopping experience. In a related study, Steinbrück, Schaumburg, Duda, and Krüger [2002] found that virtual re-embedding increases online trust specifically through the use of photographs, which help create social presence and create a virtual interaction that is similar to face-to-face communication.

The examination of the impact of website design variables on consumers' intention to transact with online retail stores has been frequently examined in Information Systems literature [Chan & Lu, 2004; Cyr & Bonanni, 2005; Gefen & Straub, 2003; Hassanein & Head, 2004; Jarvenpaa & Tractinsky, 1999; Mayer, Davis, & Schoorman, 1995; Saji, 2002; Suh & Han, 2003]. As such, website design is believed to be a significant predictor of satisfaction with an online shopping experience [DeLone & McLean, 2003]. Thus, website design elements can be a powerful contributor in stimulating customer emotions while contributing to an optimal online shopping experience [Pace, 2004].

Consumer loyalty is traditionally defined as the intention to stay with an organization [Zeithaml, Berry, & Parasuraman, 1996]. Achieving consumer loyalty is well understood in traditional shopping settings, but in online settings understanding how loyalty develops remains a crucial management issue [Luarn & Lin, 2003]. Online loyalty extends the traditional concept of brand loyalty to the technology-mediated online shopping realm. Described as an enduring psychological attachment to a specific online retailer or service provider, e-Loyalty manifests itself through consumer attitudes or behaviors toward the particular online vendor [Anderson & Srinivasan, 2003]. As a result, Internet vendors strive to capture the international market through the creation of positive online shopping experiences that encourage return visits and repeat purchase opportunities, resulting in e-Loyalty [Cyr, 2008]. Previous researchers have stressed the importance of developing e-Loyalty in online consumers. It has been shown that developing e-Loyal customers is essential to firm strategy and survival and can potentially increase revenues and profitability [Srinivasan, Anderson, & Ponnaveolu, 2002]. Repeat purchases from e-Loyal customers distinguish the successful online business ventures from the failed ones [Cyr et al., 2007].

Previous studies have also found that there is a clear difference relating to the perception of website design between women and men, which adds an additional level of complexity for e-Commerce vendors who strive to encourage e-Loyalty [Cyr & Bonanni, 2005]. Prior research on gender-related Internet attitudes and activities suggest that women are less interested in the Internet, spend less time online than men, and are less likely to purchase online [Cyr & Bonanni, 2005]. According to Dittmar et al. [2004], the computer environment is generally masculine and may lead to feelings of disempowerment in women. They also found that men reported a more satisfying online experience than women. A study conducted by Jackson, Ervin, Gardner, and Schmitt [2001] confirmed that women report less computer self-efficacy and more anxiety when using a computer, which possibly contributes to the lack of satisfaction with computer use and decreases the enjoyment of online shopping.

Reichheld et al. [2000] highlighted the merging of the social and psychological tendencies of individuals and e-Commerce technology by establishing the importance of the role of an online shopper's social networks in encouraging e-Loyalty. Reichheld et al. asserted that repeat purchases, customer satisfaction, and online word-of-mouth recommendations are stronger indicators of e-Loyalty than eyeball tracking, click-throughs, or pure purchase volume, which are traditional measures of e-Commerce success. Also, e-Loyalty is more likely to be created through friends' referral of a website than through the offering of a discount. Customers who are e-Loyal frequently refer new customers and the positive impact is amplified in the online environment through the lightning speed and infinite reach of "word-of-mouth" to potential customers [Reichheld & Scheffer, 2000]. However, the impact of an online shopper's social network in encouraging e-Loyalty may be mitigated if the shopper belongs to a demographic group or a set of demographic groups in which participation in online shopping and communication via online networks may not be readily adopted by members of the group.

METHODOLOGY

Research Model & Hypotheses

In adapting the Social Identity Approach to Website Design general theoretical framework to create a research model that investigates this study's research questions regarding

the influences of e-Loyalty particularly in women online shoppers, elements from the Cyr et al. [2007] study were used to differentiate the research model as exclusively applicable to women online shoppers through being reflective of their specific preferences. Cyr et al. [2007] found that women online shoppers' e-Loyalty were more influenced by the presence of emotive website design elements than men online shoppers' and that the enjoyment variable had a significant impact on e-Loyalty in women online shoppers while the enjoyment-loyalty relationship in men online shoppers was insignificant. With these findings, Cyr et al. [2007] concluded that women online shoppers seek warmth, sociability, and enjoyment in their online shopping experiences and online retailers that embed these social presence elements may experience a positive impact on e-Loyalty of women online shoppers.

Consistent with the Social Identity Approach to Website Design theoretical framework examined in *author omitted* [2010], it is hypothesized that the social presence-enjoyment relationship is moderated by the intersectionality of race, income, and education. The following sections present each variable, their definitions, and hypothesized relationships.

Website Social Presence

The website social presence variable explores the integration of human warmth and sociability with the user interface to positively influence consumer attitudes towards the immediate online shopping context and overall shopping experience [Dash & Saji, 2007]. Social presence is based on Communication Theory and is thought to be the capability of a medium to transmit information richness [Short et al., 1976; Straub & Karahanna, 1998].

Social presence is defined as the extent to which a medium allows users to experience others as being psychologically present [Fulk, Schmitz, & Power, 1987]. Cyr et al. [2007] defined social presence as the feeling or sense of warmth and sociability within a website, which is the user's perception that the website has human contact, is personal, and sensitive. Gefen and Straub [2003] defined social presence as "the extent to which a medium allows users to experience others as being psychologically present (p.11)." Thus, website social presence implies that a website develops a psychological connection with a user, creating a feeling of human contact and interaction and establishing the perception that the website is warm, personal, and sociable [Yoo & Alavi, 2001].

Customer feedback mechanisms and the ability to interact with a website are additional social presence design elements that may encourage users to perceive others as being psychologically present during an online shopping experience. Palmer [2002] terms these elements as responsiveness, defined as the presence of feedback to and from online shoppers during their shopping experience, and interactivity, which is the website's ability to provide interaction with online shoppers. The presence of both responsiveness and interactivity in an online shopping experience simulate the traditional social-interactive customer shopping experience where retailers and customers interact via constant two-way communication and can serve to increase the perception of social presence in women online shoppers.

Extending the conventional definition of website social presence to incorporate the traditional in-store atmospherics of responsiveness and interactivity that simulate the social aspects desired by women in their shopping experiences [Van Slyke et al., 2002], website social presence is defined in this study as the extent to which a website allows consumers to experience others as being psychologically present during the online shopping experience through visual design elements, information design elements, responsiveness, and interactivity. This definition

encompasses the system quality dimension of the DeLone and McLean [2003] Information Systems Success Model through the underlying elements of responsiveness and interactivity, which are traditional measures of system quality. It also encompasses the information quality dimension of the DeLone and McLean [2003] model through the underlying information quality measure of content relevance, particularly for a specifically defined social group.

Social presence has been shown to have a positive relationship with e-Loyalty. Prior research has suggested that the perception of website social presence positively influences user intentions in an online context [Gefen, Straub, & Boudreau, 2003; Kumar & Benbasat, 2002]. Simon [2001] suggested that websites that possess higher levels of social presence are more information rich and thus, are more likely to encourage user purchases. In addition, Gefen and Straub [2003] and Hassanein and Head [2006] found that social presence indeed has a positive relationship with purchase intention and attitude toward a website. More specifically, Hassanein and Head [2004, 2006] found that there is a positive relationship between social presence and enjoyment in their examination of an apparel e-tailer, which is also the focus of the current proposed study.

As such, the context in which a website is designed is thought to have an impact on customer satisfaction with the emotions that are invoked as a result of the interaction with the website design elements in the “consumption process” having a direct influence on satisfaction [Dekimpe, Benedict, Steenkamp, Mellens, & Abeele, 1997; Robbins & Stylianou, 2003]. Both the ambiance associated with a website and its functionality are believed to be antecedents to online satisfaction [Cyr, 2008]. Also, in their investigation, Cyr et al. [2007] posited that a direct relationship between social presence and e-Loyalty partially overlaps with the attitude towards a website.

Social presence is believed to have positive consequences in an online context, thus the proposed hypothesis relating to the social presence variable in the current study is:

H1: The perception of social presence within a B2C e-Commerce website will positively influence a woman online shopper’s enjoyment of the online shopping experience.

Enjoyment

Online shopping research has referred to the hedonic element experienced by online shoppers as enjoyment [van der Heijden, 2003]. Enjoyment exists when a user is in a concentrated state of website involvement, yet maintains a sense of control [Pace, 2004]. In the present research, enjoyment is operationalized as a single item measure which is consistent with related studies that have incorporated user satisfaction into Information Systems success models as a single-item measure [Rai et al., 2002].

Previous research has discovered that enjoyment serves as an antecedent to many resulting website usage behaviors such as using email technologies, overall Web adoption, the intention to return to a website, and developing e-Loyalty [Jarvenpaa & Todd, 1997; Koufaris, 2002; Novak et al., 2000; Trevino & Webster, 1992]. Users’ enjoyment of their online shopping experience can positively influence their perception of the website and also, their intention to return for another shopping experience or recommend the website to another shopper, both of which exhibit e-Loyal behavior. In a related study, Bhattacharjee [2001] found that user satisfaction influences a user’s continuance intention. In their e-Loyalty study, Cyr et al. [2007] posited and found that if users enjoy a website, they are more likely to have a positive attitude

towards it and develop e-loyalty to the site through repeat visits. Cyr [2008] also mentions that repeated satisfaction with an online site eventually results in e-Loyalty.

In two separate studies, Childers et al. [2001] found that enjoyment positively influences a user's attitude towards a website. More specifically, they note that enjoyment is a strong predictor of a consumer's attitude during an online shopping experience. In support of the previous findings, van der Heijden [2003] also found that enjoyment is positively related to a user's attitude towards a specific website.

Race, Income, and Education

Demographic and individual differences in users' online shopping and technology usage behavior have been described throughout the literature. In an evaluation of university students, it was found that income, education level, and Internet knowledge were significant predictors of an Internet purchase [Case et al., 2001]. According to Pew Internet Research [Horrigan, 2008]:

Some expected demographic factors account for some of the differences between online shoppers and other Internet users. Online purchasers tend to be younger, better educated, and higher-income than those who have not bought a product over the Internet.

Technology may also play a role, as online buyers are more likely than nonbuyers to have "always on" high-speed connections at home."

In the examination of race and Internet use, prior studies concluded that Whites have often been shown to own and use desktop computers than African Americans [Yardi & Bruckman, forthcoming]. African Americans have also been found to have lower rates of Internet and Broadband access than White users [Smith, 2010]. However, new research shows that African Americans are the largest users of the mobile web, or otherwise using the Internet via a cell phone [Selig Center, 2007; Rideout et al., 2010]. In the context of online shopping, Ono and Zavodny [2003] found that when controlling for income, Blacks shop online more frequently than non-Hispanic Whites. However, other research has concluded the factors of race or gender alone do not have predictive power in predicting online shopping levels [Horrigan, 2008]. Therefore, clustering demographic factors, such as race, with other variables could provide additional insight.

Income has consistently been an area of investigation of user differences as the assumption that higher income would allow for increased access to technology resources. Previously, it was noted that online shopping and income are positively related [Bagchi & Mahmood, 2004; Susskind, 2004]. A possible explanation for this trend may be that Internet users with higher incomes perceive lower risk while online shopping, while lower incomes discourage online transactions in relation to potential financial loss [Hernandez et al., 2011]. Thus, individuals with higher incomes could be perceived to also have a higher level of enjoyment while performing online shopping tasks.

Lastly, education has been shown to be correlated to Internet use as well as online shopping [Liao and Cheung 2001; Li et al. 1999]. Better educated users are more likely to be technically literate as well. Therefore, these notions have extended to shopping behavior. Users with higher levels of education have reported more often finding products online which best match their needs more often than those with less education [Punj, 2011]. However, there have also been findings to the contrary, which say that education is not a major determinant of online shopping [Bellman et al. 1999; Mahmood et al. 2004]. Thus, the correlation between education

and online shopping is an area which requires further study. Based on this information, our additional hypotheses are:

H2: A woman online shopper's race as it relates to typical digital access will positively influence the relationship between her enjoyment of an online shopping experience and e-Loyalty.

H3: A woman online shopper's income will positively influence the relationship between her enjoyment of an online shopping experience and e-Loyalty.

H4: A woman online shopper's level of education will positively influence her enjoyment of an online shopping experience and e-Loyalty.

Intention to Revisit / Intention to Recommend

In agreement with the suggestion of the viability of examining a user's intention to use a system proposed by DeLone and McLean [2003], Bhattecherjee [2001] suggests that assessing continuance intention is more suited for post-system adoption studies that investigate information systems success. Continuance intention dimensions are extremely appropriate for measurement in investigating e-Commerce success in e-tailing, primarily because repeat customers, e-Loyal customers, are highly valued and essential for the success of the e-Commerce venture and the overall success of the business [Brown & Jayakody, 2008].

In the e-Commerce marketplace, e-Loyalty can refer to an online shopper's intention to revisit a website or to consider purchasing from it in the future [Cyr & Bonnani, 2005; Koernig, 2003]. When discussing e-Loyalty, the likelihood of a purchase decision is implied instead of requiring an actual purchase [Deveraj et al., 2002]. Specifically, e-Loyalty has been conceived as a consumer's intention to purchase from a website and that he/she will not switch to another website to complete the purchase [Flavián et al., 2006]. Cyr et al. [2004] and Cyr & Bonanni [2005] define e-Loyalty as the intention to revisit a website or to purchase from it in the future. In their 2007 follow-up research, Cyr et al. refine their definition of e-Loyalty as perceived loyalty towards an online site, with the shopper intending to revisit the site or to make a purchase from it in the future. As in Cyr et al. [2007] and following the guidance of DeLone and McLean [2004] that was previously discussed, the focus of the current proposed study is on the consumer's perceived loyalty to a vendor instead of actual loyalty metrics such as purchase volume and number of repeat visits in order to capture the essence of the impact of the interaction of website design and online shoppers' human psychological profile on their decision to be e-Loyal to a website.

Online shopper recommendations also work to encourage e-Loyal behavior. Reichheld and Scheffer [2000] found that e-Loyal customers mainly found websites through referrals. To encourage referrals from online shoppers, the current study suggests that B2C e-Commerce websites should be designed using the Social Identity Approach to Website Design. In using this Approach, the social presence elements of the website are designed to activate the social identification tendencies of members of the targeted social group. Once ingroup members have interacted with the website and subconsciously identified with the salient social group, they should experience a higher level of enjoyment of the online shopping experience than outgroup members and begin to exhibit self-enhancement through revisiting the website and recommending the website to both ingroup and outgroup members.

Reflecting the conclusions presented in previous related research on the relationship between e-Satisfaction, specifically in terms of enjoyment and e-Loyalty, the hypotheses presented in the current study are as follows:

H5: A woman online shopper's enjoyment of an online shopping experience on a B2C e-Commerce website will positively influence her intention to revisit or recommend the website.

Following the previous discussion, the variables and corresponding hypotheses of the Social Identity Approach to Website Design Research Model are illustrated below:

As indicated in figure 1 (Appendix)

An Application of the Social Identity Approach of Web Design – divasnbabes.com

The current study used the primary data set collected for the *author omitted* [2010] research study as a basis for analysis, in which survey responses were collected from actual women online shoppers who were first-time visitors to divasnbabes.com, designed with the tenets of the Social Identity Theory influencing the social presence design elements in order to encourage members of the target market, in this case, moms of young children, to connect with the website through the creation of a shared social identity. According to Gommans et al. [2001], a website should be designed for its target market, thus, for the present study the website social presence elements will focus on the social identification elements that are central to moms of young children, instead of purely demographic elements designed to appeal to women in general.

The focal website, divasnbabes.com, was created, designed, and developed entirely by the principal researcher of this study. As an online boutique that caters to fashion-conscious mothers and their children ages newborn – preschool, its mission is to use a unique blend of technology, fashion, and family to create an online “shop and share” haven for mothers through providing an online community designed to enrich their social experience and offering stylish, yet comfortable apparel for fashion-conscious mothers and their young children to support their postpartum self-esteem and encourage positive post-baby body image.

The focal website, divasnbabes.com was chosen for the present study for several reasons. Firstly, divasnbabes.com uses a virtual storefront Internet business model, which provides international exposure to the online boutique, maximizing the potential consumer base. It is firmly positioned and primarily operates in the online e-Commerce space, which appeals to busy moms. Using the Internet to connect with mothers across the globe, divasnbabes.com has built a global network of mothers throughout North America, South America, Europe, Asia, Australia, and Africa.

Secondly, divasnbabes.com is an online boutique that specifically focuses on selling apparel products, which are products that are constantly ranked as one of the highest product categories frequently purchased via the Internet [Yoh, Damhorst, Sapp, & Laczniak, 2003]. Thus, visitors to divasnbabes.com are likely to be familiar with purchasing apparel online and are likely to adopt the website for use in purchasing apparel in which they are interested, mitigating the potential for an additional barrier to website adoption.

In addition, the choice of divasnbabes.com as an example of an independent virtual-only apparel online retailer creates a realistic scenario in which to examine the importance of establishing e-Loyalty through website design. Virtual-only apparel online retailers, in

particular, have one of the highest cost barriers to establishing e-Loyalty with the cost to obtain new customers being 20% to 40% higher than traditional clicks-and-mortar e-Commerce ventures [Reichheld & Schefter, 2000]. On a positive note, profit growth for virtual-only apparel online retailers who establish e-Loyalty accelerate at a faster rate in later years. Customers who are e-Loyal to virtual-only apparel online retailers spend more than twice as much in months 24 through 30 than in the first six months of their shopping relationship [Reichheld & Schefter, 2000].

Also, since apparel is a product category with which many consumers are highly involved, purchasing apparel is usually a very personal task that elicits ego involvement, because of apparel's symbolic and hedonic characteristics [Myers & Ogunc, 2008]. As a result, apparel purchases involve a recognizance of one's subconscious preferences and how individuals wish to define themselves as they relate to others, creating a ripe scenario for evoking and examining the central tenets of the Social Identity Theory.

Finally, divasnbabes.com is an actual and functioning online boutique with an online presence since 2006 that has generated international traction and exposure. Since its inception, divasnbabes.com has been featured in numerous media outlets, including People Magazine, Essence Magazine, Pregnancy Magazine, Mothering Magazine, NBC, PBS, and Telemundo, and has been contacted by The Rachael Ray Show, Warner Brothers, and The Oprah Winfrey Show for upcoming features. In addition to the apparel selections, divasnbabes.com also features an In the News page that highlights its many press features and a Gallery/Testimonials page that features photos and testimonials from actual past and current divasnbabes.com customers. Thus, the research questions proposed by the present research study will be examined using a robust and authentic e-Commerce entity that has been successfully operating in the virtual marketplace, instead of an experimental e-Commerce entity that may lack the overall processes and standard operating procedures that have a peripheral impact on the environment and context in which an e-Commerce business operates.

Website Design Overview

The online store design used in the current research study considers the atmospherics of the web-based boutique and is designed to encourage social presence through several elements: socially rich and emotive text context, pictures of actual moms interacting with their children while modeling Divas N Babes apparel including profiles with details of actual moms who inspire each product, and Twitter tweets relating to motherhood, style, and the challenge of balancing the two from the owner of divasnbabes.com who is also a member of the targeted ingroup. These elements have been selected based on the results of previous research studies that have examined the social presence construct. According to Gefen and Straub [2003], pictures and text on a website simulates the psychological presence of others in the same manner as photographs and letters. Also, emotive text and pictures of actual people have been shown to result in higher perceptions of social presence by website visitors [Hassanein & Head, 2006]. The text social presence elements of divasnbabes.com are designed to encourage the self-categorization and social identification process through the use of vocabulary and situational recall that reflect the life of the prototypical member of the focal social group.

In addition, all of the pictures that are displayed on the divasnbabes.com website will be directed-candid action shots featuring a mother and her child(ren) wearing the apparel in locations depicting situations that a prototypical mother would experience, demonstrating that

the apparel is fashionable, yet functional. Some examples include shopping at the supermarket, playing with children at the playground, shopping at the mall, having a playdate at a friend's house, taking a stroll through the neighborhood, etc. Instead of the typical studio still product shot with the apparel being unworn and displayed against a solid background, the apparel for sale at divasnbabes.com will be displayed through situational pictures to which members of the focal social group and primary target market, moms of young children can understand and relate. This brings the social group membership to the forefront, making it salient per the Social Identity Theory, and sets the groundwork for self-categorization and depersonalization to occur.

These elements were incorporated throughout the divasnbabes.com website in order to promote and encourage social presence by enhancing the perception that other shoppers and members of the social group of interest are present during the online shopping experience at the virtual boutique. The incorporated social presence elements will be consistent with the definition of social presence as previously presented: the extent to which a website allows consumers to experience others as being psychologically present during the online shopping experience through visual design elements, information design elements, responsiveness, and interactivity [Cyr et al., 2007; Fulk, Schmitz, & Power, 1987; Gefen & Straub, 2003; Palmer, 2002].

Data Collection

The survey instrument consisted of 27 previously validated items from related studies relating to website quality, Social Identity Theory, and e-Loyalty. In accordance with the advice suggested by DeLone and McLean [2004], existing e-Commerce success measures have been used as a basis of the proposed theoretical framework and have been expanded to include existing measures from the Social Identity Theory literature to examine the possible social identity link in encouraging e-Loyalty in online shoppers. According to DeLone and McLean [2004], "tried and true measures should be enhanced and expanded with modifications. . . completely new and untested metrics should be adopted only as a last resort." All items are constructed as agree-disagree statements and are measured against a 5-point Likert scale.

The online survey instrument was administered via SurveyMonkey.com to women online shoppers who were invited to access the link via email, Facebook, Twitter, divasnbabes.com, or on other online forums, social networking sites, and communities where the link was posted by previous respondents or other centers of influence. Participants were able to complete the study from any computer using an Internet connection, which increased the realism of the online shopping experience [Cyr et al., 2007]. The task for the study consisted of participants browsing through various areas of the divasnbabes.com website at will. There was no purchase necessary for participation. Participants were given the following task instructions:

"Please visit www.divasnbabes.com and navigate through the website per your interest before completing this survey. Purchase at www.divasnbabes.com is **NOT** necessary to complete the survey."

The survey was active for 26 days, from February 2, 2010 through February 28, 2010. In total, 946 respondents participated in the survey. The high number of participants in the survey is explained by the boundless nature of the data collection design. The survey was open to any woman older than 18 years of age with an Internet connection. As such, the potential respondent pool included the 106.3 million estimated women in the United States who are Internet users [Phillips, 2009] in addition to the women Internet users located throughout the world.

Of the 946 survey responses collected, 793 surveys were completed, yielding an 83.8% completion rate. The IP address of each respondent was captured and rules were set to allow respondents to complete the survey only once from a particular IP address. To illustrate the uniqueness of each respondent, Appendix D lists the IP address associated with each response, partially displayed to ensure privacy. Of the total surveys completed, 491 (51.9%) were from respondents who were moms with young children and 455 (48.1%) were from respondents who were women who are not moms with young children. The sample population of interest in this study is moms with young children who are first time visitors to divasnbabes.com. Of the 491 moms with young children who responded to the survey, there were 322 fully completed surveys from those who were also first time visitors to divasnbabes.com. Only those surveys that were fully completed were included in the data analysis for this study. Partially completed surveys were not included to avoid the issue of missing data calculations.

Optional demographic data were also collected from each respondent including age, marital status, number of children, current employment status, level of education completed, annual household income, geographic location, type of primary Internet connection, and number of years shopping online. As the three demographic variables of interest in this study are race, income, and education, only those completed responses that include data for all three will be considered for data analysis. As a result, the population for this study included 296 participants.

Data Analysis

Several techniques for data analysis were performed to ensure that the rigor of the current study complies with the current standards that are considered suitable for academic research in the field of information systems. In the foundation study, tests relating to non-response bias, content validity, reliability, unidimensionality using both EFA and CFA techniques, convergent validity, discriminant validity, and criterion-related validity were performed on the data yielding acceptable results for each test [author omitted, 2010]. As a result, these tests were not re-performed for the current study.

The relationships between the focal demographic variables of race, income, and education and the enjoyment of an online shopping experience and development of e-Loyalty were examined via Structural Equation Modeling (SEM) using AMOS 20 [Arbuckle, 1997]. SEM allows for the simultaneous testing of structural and measurement models [Bagozzi & Yi, 1989] and it provides a detailed analysis of the interrelationships between modeled variables [Fornell, 1982]. In the structural model, Social Presence, defined as the extent to which a website allows consumers to experience others as being psychologically present during the online shopping experience, was modeled as the exogenous variable, and Enjoyment and E-Loyalty were modeled as the endogenous variables as in the foundation study [author omitted, 2010]. The three demographic variables of race, income, and education were treated as independent moderating variables to examine their possible moderation on the relationship between Social Presence, Enjoyment and e-Loyalty. Each moderating relationship was examined in separate measurement models as existing literature does not provide substantial evidence that these three variables exhibit interdependency as it relates to their influence on technology adoption [Hoffman & Novak, 1998].

The model fit was assessed using the generally accepted SEM techniques of ratio of χ^2 to the degree of freedom (< 3.0), CFI (> 0.90), SRMR (< 0.08), RMSEA (< 0.08), CAIC ($<$

saturated and independence models), PGFI (> 0.50), and PNFI (> 0.50) [Byrne, 2010]. The initial model estimation yielded acceptable values for all tests indicating a satisfactory model fit.

In order to examine the possible moderating relationship of each of the demographic variables on the enjoyment of the online shopping experience, the differences between the path coefficients between the latent variables in each of the modeled relationships were examined for statistical significance using multi-group analysis [Arbuckle, 1997]. The discovery of statistical significance will indicate the possibility that the particular demographic variable indeed influences the enjoyment of the online shopping experience and would warrant further interest and examination of the relationship.

Models were examined in three categorical sets, relating to Race, Education, and Income, respectively. In each set, multiple groups were created corresponding to the self-reported groups in the survey instrument.

Race

To analyze the data relating to the moderation of Race in the Social Presence – Enjoyment – E-Loyalty relationship, the data was divided into the following groups: White (Non-Hispanic), Black (Non-Hispanic), and Other Race/Ethnicity, which included responses indicating American Indian/Alaska Native, Asian/Asian-American, Native Hawaiian/Other Pacific Islander, Hispanic/Latino/Spanish origin, Middle Eastern, or Other. Data in the above Other Race/Ethnicity subgroups were combined into one group for data analysis to account for their respective small sample sizes, which prohibited proper SEM parameter estimation. The model fit for the Race model yielded acceptable values for all model fit indices indicating a satisfactory fit. An examination of the Pairwise Parameter Comparisons for each path coefficient using a z-test at $p < 0.05$ yielded no significant differences between the Social Presence – Enjoyment and Enjoyment – E-Loyalty paths across the three racial groups. Thus, it can be concluded that Race does not moderate the relationship between Social Presence and E-Loyalty in women online shoppers.

Education

To analyze the data relating to the moderation of Education, the data was divided into the following groups: HS/GED, Bachelor Degree, Master Degree, Doctoral Degree, and Other Education, which encompasses responses indicating Post-Baccalaureate, Post-Graduate, Post-Doctoral, and Other. As with the analysis of Race, the Other Education subgroups were combined to allow for proper SEM parameter estimation. An analysis of the model fit for the Education model yielded acceptable values for all model fit indices except for the SRMR of 0.0853, which is slightly above the recommended value of 0.08 or below. The modification indices indicated that there was possible covariance between the error terms within the HS/GED and Bachelor Degree models, however, for consistency with the other group and subgroup models, the models were not altered. Thus, it is concluded that the model fit is satisfactory. An examination of the Pairwise Parameter Comparisons for each path coefficient using a z-test at $p < 0.05$ yielded no significant differences between the Social Presence – Enjoyment and Enjoyment – E-Loyalty paths across the five Education groups. Thus, it is concluded that the educational level of women online shoppers does not moderate the relationship between Social Presence and E-Loyalty.

Income

To analyze the data relating to the moderation of Income, the data was divided into the following groups: Less than \$35,000, \$35,000-\$49,999, \$50,000-\$74,999, \$75,000-\$99,999, \$100,000-\$149,999, \$150,000-\$199,999, and \$200,000 or greater. Data in the collected categories of Less than \$5,000, \$5,000-\$11,999, \$12,000-\$15,999, \$16,000-\$24,999, and \$25,000-\$34,999 were aggregated into the Less than \$35,000 category in order to meet proper sample size guidelines for SEM parameter estimation. The model fit analysis for the Income model yielded acceptable values for all indices except for the CFI of 0.88 (recommended value > 0.90) and the SRMR of 0.9 (recommended value < 0.80). An examination of the modification indices reveal that there was possible covariance between the error terms within the Less than \$35,000, \$75,000-\$100,000, and \$200,000 or greater groups. Again, for consistency, model was not altered. Thus, since the two indices vary slightly from the recommended guidelines and all of the other index guidelines were met, it is concluded that the model fit is satisfactory. An examination of the Pairwise Parameter Comparisons for each path coefficient using a z-test at $p < 0.05$ yielded no significant differences between the Social Presence – Enjoyment and Enjoyment – E-Loyalty paths across the seven income groups. Thus, it is concluded that the income level of women online shoppers does not moderate the relationship between Social Presence and E-Loyalty.

DISCUSSION

The results of the current study continue to support one of the major contributions of the *author omitted* [2010] study, which presented an alternative approach proposing social identity as a psychographic variable that influences the creation of e-Loyalty in women online shoppers instead of the traditional focus on the demographic profile. In this study, the intersectionality of the demographic dimensions of Race, Income, and Education were not found to have a significant moderating impact on the enjoyment of an online shopping experience and the development of E-Loyalty in women online shoppers. This suggests that the complexity and multidimensionality of the psychographic social identification profile possibly supersedes the one-dimensional demographic identification variables in defining the traits and preferences of online shoppers, specifically women online shoppers. By modeling the Social Presence – Enjoyment – E-Loyalty relationship using social identity as an underlying influence, which transcends, yet includes members across the demographic variables previously considered, women online shoppers who identified with the salient social group enjoyed the socially infused online shopping experience and intended to revisit or recommend to other social group members. In this study, the importance of social identity as a consideration in understanding user behavior continues to emerge, highlighting its increasing relevance in understanding the complex socio-technical interaction inherent in e-Commerce adoption.

CONCLUSION

By extending the study of the role of enjoyment on the development of e-Loyalty among women to include additional identity characteristics, the notion of user diversity can be highlighted in the discourse on website design innovation for e-commerce. By investigating the

intersectionality of the factors of race, income, and education level, it is a goal to uncover a more developed understanding of not only how different women relate to technology, but how those factors show differences among women as a group. This study is meant to evaluate how user differences can attribute to different interactions with technology, which could subsequently provide critical design information to online retailers and content providers alike.

As e-Commerce websites evolve, as does the process online shopping, this research investigates the topic to provide empirical evidence to support the customization or tailoring of Websites based on in-depth studies, rather than generalizations. Thus, the use of women as the primary group of interest is warranted as research has shown their increasing online presence. In addition, looking at users from the vantage of their many characteristics will help to better inform researchers, policy makers and practitioners alike regarding technology adoption and use.

Through the evaluation of emotionally infused website elements and the intersection of the identity characteristics or race, income, and education level, the contribution of this research will be to practice and the research community. The contribution to practice will be to inform those involved in the design, development and maintenance of e-commerce Websites. This research is positioned to encourage those involved in Website governance to consider the complexities of all users and their unique needs as they develop strategies to engage and increase their customer population. The contribution to the research community will be to add to the discourse on e-Loyalty and human differences as well as address generalizations about women and technology and the Digital Divide. It is our hope in future research to extend our study to male online shoppers as well.

REFERENCES

- Alvarez, A. S. "Behavioral and Environmental Correlates of Digital Inequality." *IT & Society*, Vol.1, No:5, 2003.
- Anderson, R.E., and Srinivasan, S.S. E-satisfaction and e-loyalty: A contingency framework. *Psychology & Marketing*, Vol.20, No.2:123–138, 2003.
- Arbuckle, J. L. Amos user's guide. Chicago, IL: Small-Waters, 1997.
- Bagchi, K. and Mahmood, M. A. A Longitudinal Study of Business Model of On-Line Shopping Behavior Using a Latent Growth Curve Approach. *Proceedings of the Tenth Americas Conference on Information Systems*, New York, NY, 2004.
- Bagozzi, R.P., and Yi, Y. On the use of structural equation models in experimental designs. *Journal of Marketing Research*, Vol.26:271–284, 1999.
- Bellman, S., Lohse, G. L. and Johnson, E. J. Predictors of Online Buying Behavior, *Communications of the ACM*, Vol.42, No.12: 32-38, 1999.
- Butcher, K., Sparks, B., and O'Callaghan, F. Evaluative and relational influences on service loyalty. *International Journal of Service Industry Management*, Vol.12, No.4:310–327, 2001.
- Byrne, B.M. Structural equation modeling with AMOS: Basic concepts, applications, and programming. New York, NY: Routledge, 2010.
- Case, T., Burns, O. M., and Dick, G. N. Drivers of on-line purchasing among U.S. university students. *Proceedings of the 7th Americas Conference on Information Systems*, Boston, MA, pp. 873-878, 2001.

- Chan, S. and Lu, M. Understanding Internet banking adoption and use behavior: A Hong Kong perspective. *Journal of Global Information Management*, Vol.12, No.3:21–43, 2004.
- Chen, S.C. and Dhillon, G.S. Interpreting dimensions of consumer trust in e-commerce. *Information Management and Technology*, Vol.4: 303–318, 2002.
- Cyr, D. Modeling web site design across cultures: Relationships to trust, satisfaction, and e-Loyalty. *Journal of Management Information Systems*, Vol.24, No.4:47–72, 2008.
- Cyr, D. and Bonanni, C. Gender and website design in e-business. *International Journal of Electronic Business*, Vol.3, No.6:565–582, 2005.
- Cyr, D., Hassanein, K., Head, M., and Ivanov, A. (2007). The role of social presence in establishing loyalty in e-service environments. *Interacting with Computers*, Vol.19:43–56, 2007.
- DeLone, W.H. and McLean, E.R. Measuring e-Commerce success: Applying the DeLone & McLean information systems success model. *International Journal of Electronic Commerce*, Vol.9, No.1, 31–47, 2004.
- DeLone, W. and McLean, E. The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information Systems*, Vol.19, No.4:9–30, 2003.
- DiMaggio, P. and Hargittai, E. From the Digital Divide to Digital Inequality: Studying the Internet Use as Penetration Increases. *Princeton University Center for Arts and Cultural Policy Studies*, Working Paper Series, No.15, 2001.
- Dittmar, H., Long, K., and Meek, R. Buying on the internet: gender difference in on-line and conventional buying motivations. *Sex Roles*, Vol.50, No.5/6:423–444, 2004.
- Elbert, C.D. and Alston, A.J. An Evaluative Study of the United States Cooperative Extension Service's Role in Bridging the Digital Divide. *Journal of Extension*, 2005.
- Fornell, C. A second generation of multivariate analysis methods. New York, NY: Praeger, 1982.
- Garbarino, E. and Strahilevitz, M. Gender differences in the perceived risk of buying online and the effects of receiving a site recommendation. *Journal of Business Research*, Vol.57, No.7, 768–775, 2004.
- Hacker, K. L. and Mason, S. M. Ethical gaps in studies of the digital divide. *Ethics and Information Technology*, Vol.5, No.2:99-115, 2003.
- Hargittai, E. Second-Level Digital Divide: Differences in People's Online Skills. *First Monday*, Vol.7, No.4, 2003.
- Hernández, B. Jiménez, J. and Martín, M.J. Age, gender and income: do they really moderate online shopping behaviour? *Online Information Review*, Vol.35, No.1:113-133, 2011.
- Hoffman, D.L. and Novak, T.P. Bridging the Racial Divide on the Internet. *Science*, Vol.280 :390-391, 1998.
- Horrigan, J. *Online Shopping: Pew Internet research*. Retrieved from: <http://www.pewinternet.org/Reports/2008/Online-Shopping.aspx>, 2008.
- Jackson, L.A., Ervin, K.S., Gardner, P.D., and Schmitt, N. Gender and the internet: Women communicating and men searching. *Sex Roles*, Vol.44:363–379, 2001.
- Katz, J. and Aspden, P. Motivations for and Barriers to Internet Usage: results of a national public opinion survey. *Internet Research*, Vol. 7, No.3, 1997.
- Kling, R. "Technological and Social Access on Computing, Information and Communication Technologies." A White Paper for the Presidential Advisory Committee on High-Performance Computing and Communications, Information Technology, and the Next Generation Internet, 1998.

- Li, H., Kuo, C. and Russell, M. G., "The Impact of Perceived Channel Utilities, Shopping Orientations, and Demographics on the Consumer's Online Buying Behavior," *Journal of Computer-Mediated Communication*, Vol.5, No.2, 1999.
- Liao, Z. and Cheung, M. T., "Internet-Based E-Shopping and Consumer Attitudes an Empirical Study," *Information & Management*, Vol.38, No.5:299-306, 2001.
- Luarn, P. and Lin, H.H. A customer loyalty model for e-service context. *Journal of Electronic Commerce Research*, Vol.4, No.4:156–167, 2003.
- Mahmood, M. A., Bagchi, K. and Ford, T. C., "On-Line Shopping Behavior: Cross-Country Empirical Research," *International Journal of Electronic Commerce* Vol. 9, No. 1: 9-30, 2004.
- Moss, G.A. and Gunn, R.W. Websites and services branding: Implications of universities' websites for internal and external communication. *Proceedings of the 4th International Critical Management Studies Conference*, 2005.
- Palmer, J.W. (2002). Web site usability, design, and performance metrics. *Information Systems Research*, Vol.13, No.2:151–167, 2002.
- Phillips, L.E. *Men online*. Retrieved from eMarketer: http://www.emarketer.com/Reports/All/Emarketer_2000547.aspx, 2009..
- Porter, C.E. and Donthu, N. Using the technology acceptance model to explain how attitudes determine internet usage: The role of perceived access barriers and demographics. *Journal of Business Research*, Vol.59, No.9, 999-1007, 2006.
- Punj, G. Effect of Consumer Beliefs on Online Purchase Behavior: The Influence of Demographic Characteristics and Consumption Values. *Journal of Interactive Marketing*, Vol.25, No.3, 134-144, 2011.
- Reichheld, F., Markey, Jr., R. and Hopton, C. (2000). E-customer loyalty – applying the traditional rules of business for online success. *European Business Journal*, Vol.12, No.4:173–179, 2000.
- Reichheld, F.F. and Scheffer, P. E-loyalty: your secret weapon on the web. *Harvard Business Review*, Vol.78, No.4:105–114, 2000.
- Rideout, V.J., Foehr, U.G. and Roberts, D.F. Generation M2: Media in the Lives of 8- to 18-Year Olds. Kaiser Family Foundation. Retrieved from: <http://www.kff.org/entmedia/mh012010pkg.cfm>, 2010.
- Selig Center for Economic Growth. African-American/Black Market Profile. 2007. Retrieved from http://www.magazine.org/content/files/market_profile_black.pdf, 2008.
- Silverstein, M.J. and Sayre, K. Women want more: How to capture your share of the world's largest, fastest-growing market. New York, NY: HarperCollins Publishers, 2009.
- Smith, A. Technology Trends Among People of Color. Pew Internet Research. Retrieved from: <http://www.pewinternet.org/Commentary/2010/September/Technology-Trends-Among-People-of-Color.aspx>, 2010.
- Srinivasan, S.S., Anderson, R., and Ponnayolu, K. Customer loyalty in ecommerce: An exploration of its antecedents. *Journal of Retailing*, Vol.78:41–50, 2002.
- Susskind, A. Electronic Commerce and World Wide Web Apprehensiveness: An Examination of Consumers' Perceptions of the World Wide Web. *Journal of Computer-Mediated Communication*, Vol.9, No.3, 2004.
- Sutter, J. *Report: Racial inequalities persist online*. Retrieved from CNN Technology Website: http://articles.cnn.com/2010-11-08/tech/broadband.digital.divide_1_high-speed-internet-internet-access-broadband-internet?_s=PM:TECH, 2010.

Yardi, S., and Bruckman, A. (forthcoming). Income, Race, and Class: Exploring Socioeconomic Differences in Family Technology Use. *In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '12)*. Austin, Texas.

Zeithaml, V.A., Berry, L.L., and Parasuraman, A. The behavioural consequences of service quality. *Journal of Marketing*, Vol.60:31–46, 1996.

Appendix 1 – Figure 1 - The Social Identity Approach to Website Design Research Model

