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Online Product Search and Purchase Behavior of Generation Y

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Abstract - This paper examines online product search and purchase behaviors of Generation Y. A survey of 116 undergraduate college students with questions regarding the types of products researched and purchased over the Internet, the type of information they looked for when researching the products, reasons for not purchasing products online, and reasons for returning products purchased over the Internet. While both male and female college students use the Internet to research and purchase products, the findings indicate that they differ significantly in the types of products they research and purchase online, the kinds of information they sought when researching products over the Internet, and their reasons for not purchasing a product online.

Keywords - Online shopping, Generation Y, College Students, Gender Differences

Relevance to Marketing Educators, Researchers and/or Practitioners - This paper provides marketing educators, researchers and practitioners with a better understanding of the online purchase behaviors of Generation Y, as well as useful information for practitioners that use gender-based strategies to segment their consumer market.

INTRODUCTION

A wide range of changing market trends in combination with the unique nature and influence of Generation Y consumers makes it important to understand the market behavior of this important group (Drake-Bridges and Burgess, 2010; Nicoleta-Dorina and Thedora-Alexandra, 2010; Noble et al., 2009; Smith, 2012). In particular, given the
influence of the internet on this consumer cohort it is valuable to research Generation Y market behavior as related to the internet (Lester and Lloyd, 2005). Previous research has examined Generation Y college students’ use of the Internet for academic and educational purposes, but theoretical and empirical research about their online shopping behaviors is limited (Noble et al., 2009). College students are heavy users of the Internet (Jones, 2002), and they are an important consumer group since they represent nearly $69 billion in discretionary spending annually (Wong, 2010). Today’s college students should be of particular interest to marketers, since the majority of college students are Generation Y consumers. Generation Y, also known as “echo boomers,” consists of about 56 million people (Taylor and Cosenza, 2002) and is the largest consumer group in U.S. history (Scott, 2006). This cohort continues to grow as a powerful buying group and as consumers they “love to shop” (Taylor and Cosenza, 2002). The sheer magnitude of this generation has a profound effect on the retail industry (Kim and Ammeter, 2008). As Generation Y college students graduate and enter the work force, their earning potential will make them even more important as a consumer group. The ample purchasing power and technological savvy of this consumer population will play a large part in determining whether online retailers succeed over the long term (Hanford, 2005).

The objective of this research is to investigate gender differences in internet product search and purchase habits of Generation Y college students. Examining the Internet usage of college students has been insightful in the past, as both the male and female members of this group generally have equal access to the Internet (Odell et al., 2000). Researchers have examined issues pertaining to gender differences in overall Internet usage among college students (Noble et al., 2009) but research that addresses specific gender differences in online purchasing behavior among Generation Y college students has been limited. Since male and female college students use the Internet more often than the general population, the gender gap in Internet usage among this group should be more narrow—for academic and shopping purposes alike. This research determines what differences exist, if any, in the shopping habits of male and female college students with regard to types of products they purchase online, as well as types of products they research online, but do not purchase. The results indicate that there are significant differences by gender in the types of products that are researched and purchased online, in the type of information sought when researching products over the Internet, and in reasons for not purchasing a product online.

BACKGROUND

Generation Y has been the focus of a great deal of research related to their marketplace activity. This includes research on the cohort’s shopping behavior (Kinley et al., 2009; Lester et al., 2005; Rajamma et al., 2010), product involvement (Eastman and Liu, 2012; Gupta et al., 2010, media habits (Furlow, 2011; Kilian and Langner, 2012), consumer loyalty (Gurau, 2012), and their perception of web based marketing systems (Cole et al.,
Despite the level of interest in this group, comprehensive research has not been reported on Generation Y online shopping behavior. Generation Y college students are an important consumer group to study because research documents they have unique purchasing behavior (Arnaudovska et al., 2010), and they generally have positive attitudes toward shopping online (Cole, 2011; Xu and Paulins, 2005). College students buy online, more so than the general population, and frequently spend money on clothing, computer software, books, event tickets, music, flowers, airline tickets, and hotels (Comegys and Brennan, 2003). Lester, Forman, and Loyd (2006) found that 91% of the college-age market completed online purchases, with close to a quarter of the buyers spending over $500 per year for banking service, concert tickets, apparel and entertainment products. According to American Demographics (2001), the number of potential customers in Generation Y (Gen Y) is about 71 million, out of whom college students alone have a purchasing power of approximately $105 billion (Rajamma and Neeley, 2005).

Generally, online shoppers tend to be younger than online non-shoppers. Although larger percentages of older generations are online now than in the past, young people still dominate the online population, according to Pew Research Center’s Internet and American Life Project surveys taken from 2006-2008 (Jones and Fox, 2009). Not only is the younger generation more familiar with e-commerce, they also process website information five times faster than older generations (Kim and Ammeter, 2008; O’Donnell, 2006). Still, there are some members of the younger generation who do not like to shop online, primarily because they do not feel secure when purchasing online (Sullivan, 2004). A study by Forrester Research Inc. investigated the top reasons why young consumers do not shop online found that credit card security concern was the most important deterrent to online shopping. Other reasons included inability to see and touch the product, not trusting that online ordering will go smoothly, having concerns about giving out personal information, and the added expense of shipping (George, 2004; Swinyard and Smith, 2003; Zhou et al., 2007).

Previous research indicates many consumers use the Internet to shop or browse for information on products and services, but a far smaller percentage have actually made purchases online (Esrock, 1999). A variety of factors influence a consumer’s acceptance of online shopping (Zhou et al., 2007). Many consumers, even those who prefer to shop from a single-channel such as the retail store, still use the Internet as a source of information when going through the consumer decision-making process (Stringer, 2004). These online browsers do not purchase online because they are more concerned than online buyers about the design and security of online stores, customer service, and product information such as price, selection, and quality (Lepkowska-White, 2004). Instead, online browsers tend to research products such as electronics, jewelry, appliances, sporting goods, and exercise equipment prior to making a purchase decision. Armed with sufficient product knowledge, these consumers are more likely to be ready to purchase when entering the store (Stringer, 2004).
The influence of gender on shopping behavior for generation Y have been examined in the literature, including differences in online shopping behavior (Bellman et al., 2009; Heidarzadeh and Aghasibeig, 2010; Rajamma et al., 2010; Solka et al., 2011). A gender gap in Internet usage has been identified and has been attributed to the fact that men may feel more comfortable than women when using computers and the Internet. Men and women have been shown to differ in their attitudes toward shopping both online and in retail stores. Men hold more favorable attitudes toward both the Internet and computers in general (Bimber, 2000; Jackson et al., 2001), and have been more avid users of the Internet for many purposes, including online shopping (Dennis et al., 2010). In contrast, women have accounted for more than 70% of all purchases made in more traditional “off-line” purchase environments such as retail stores and catalogs (U.S. Census, 2000). More recently these demographics are starting to shift as men and women have been researching products and making purchases online at more similar rates (Pew, 2008; Pew, 2010).

While the gender gap in Internet usage has been closing, disparities still exist in the purposes for which males and females use the Internet (Odell et al., 2000). Generally, women have been found to be less likely than men to purchase online and more likely than men to spend less money on online purchases. Men make more purchases than women (Stafford et al., 2004) and spend more money online (Susskind, 2004). Women have attributed this cautious behavior to a lack of confidence with computer usage, unfamiliarity with the Internet (Mitra et al., 2005), concern about security issues (Garbarino and Strahilevitz, 2004), and the limited amount of information provided on some websites (Jung-Hwan, 2010). Studies indicate that men have a more favorable perception of online shopping, view Internet shopping as more convenient, and are more trustworthy of online shopping than women (Rodgers and Harris, 2003; Slyke, 2002). More recently, however, there is some evidence that an increasing percentage of women are making online purchases and becoming more sophisticated users of the Internet (Hannah and Lybecker, 2010). This evidence is illustrated by a recent study indicating that females tend to search for a variety of information regarding both product and customer reviews more in the online shopping process, and read more customer reviews when searching for experience goods than when shopping for search goods. Males showed no significant difference in information search depending on product categories (Park et al., 2009).

In the college age group, the gender gap in Internet usage has narrowed significantly. In general, a larger percentage of online purchasers have a college education (Pew, 2008). This is primarily because college students rely heavily on the web for both general and academic information (Metzger et al., 2003; Mitra et al., 2005). Yet gender differences have still been observed among college students regarding their reasons for Internet use. While college students have strongly embraced the Web as a shopping tool, they are more apt to purchase some types of products on the Web than others—favoring services over tangible goods (Lester et al., 2006). In a study of college
students’ shopping orientations, female students had higher shopping enjoyment, brand/fashion consciousness, price consciousness and shopping confidence than male students; whereas male students showed higher convenience/time consciousness than female students. Female students also conducted a greater number of online information searches and had a greater number of purchase experiences for apparel products than male students (Seock and Bailey, 2008). Another study of college students found that females were more likely to use the Internet for e-mail and school research, whereas males were more likely to use the Internet to visit sites, research purchases, check the news, play games, and listen to or copy music (Odell et al., 2000).

Despite previous research, there is still a lack of clarity regarding gender differences regarding use and experience of the Internet (Dittmar et al., 2004), particularly with Generation Y consumers. It is generally believed with respect to traditional shopping (e.g., shopping at malls, shopping for groceries at brick and mortar shops) that men find it an irritating or frustrating activity, so they should prefer to shop online more than women who are posited to like shopping and spend more time and effort shopping (Rajamma and Neeley, 2005). Yet, these gender differences might not hold true for Generation Y college students who have had more opportunities to access the Internet and spend a lot of time online (Comegys and Brennan, 2003).

**METHOD AND RESULTS**

This study involved a survey of 116 undergraduate college students. The sample consisted of 57% females and 43% males with a mean age of 21 years. The survey included open-ended questions regarding the 1) types of products that were researched but not purchased over the Internet and the 2) types of products that were both researched and purchased over the Internet. In addition, respondents were asked to give 3) the type of information they looked for when researching the products, 4) if and why they selected another source (other than Internet) for the actual purchase, 5) why they chose not to purchase certain products over the Internet, and 6) if and why any products purchased over the Internet were returned. In order to observe the differences between male and female college students’ online product research and purchase habits independent samples t-tests were used. The following specific hypotheses were tested:
**Hypothesis 1:** Products researched and purchased online significantly differ by gender.

**Hypothesis 2:** Products researched online but not purchased significantly differ by gender.

**Hypothesis 3:** The types of product information included in online research significantly differ by gender.

**Hypothesis 4:** Reasons for not purchasing a product online significantly differ by gender.

**Hypothesis 5:** Reasons for selecting a non-internet purchase source significantly differ by gender.

**Hypothesis 5:** Likelihood of returning a product purchased online significantly differ by gender.

*Products Researched and Purchased.* The results of the independent samples t-test indicate significant differences between male and female college students in the types of products they researched and purchased over the Internet. When shopping online, female college students were significantly more likely to purchase clothes ($t=1.646, p<.05$), books ($t=1.371, p<.01$), jewelry ($t=2.434, p<.001$), toiletries ($t=1.781, p<.001$), flowers ($t=1.239, p<.05$), crafts ($t=1.530, p<.01$) and travel ($t=1.592, p<.001$).

When shopping online, male college students were significantly more likely to purchase sporting goods ($t=-4.355, p<.001$), electronics ($t=-2.670, p<.001$), car parts ($t=-2.214, p<.001$), games ($t=-2.107, p<.001$), food ($t=-2.685, p<.001$), music ($t=-2.063, p<.001$), magazine subscriptions ($t=-1.644, p<.001$), tools ($t=-1.151, p<.05$), bike parts ($t=-1.151, p<.05$), toys ($t=-1.151, p<.05$), appliances ($t=-1.151, p<.05$), and motorcycles ($t=-1.151, p<.05$).

*Products Researched, Not Purchased.* There was a significant difference between male and female college students in the types of products they researched, but did not purchase, over the Internet. The results of the independent samples t-test indicate significant differences between male and female college students in the types of products researched, but not purchased online. Female college students were significantly more likely to research clothes ($t=1.618, p<.001$), books ($t=1.316, p<.01$), cosmetics ($t=1.239, p<.05$), household goods ($t=2.240, p<.001$), appliances ($t=1.530, p<.01$), and toiletries ($t=1.781, p<.001$). Male college students were significantly more likely to research automobiles ($t=-1.635, p<.01$), sporting goods ($t=-4.028, p<.001$), electronics ($t=-1.950, p<.001$), car parts ($t=-1.564, p<.01$), food ($t=-1.644, p<.001$), music
(t=-1.309, p<.01), motorcycles (p<.05), health products (t=-2.063, p<.001), and loans (t=-1.151, p<.05).

**Types of Product Information Included in Online Research.** When researching products over the Internet, college students primarily reported searching for information regarding price (66%) and product information (52%). Other search information reported included customer reviews (23%), quality (17%), selection (12%), shipping costs (8%), availability (8%), product pictures (8%), and delivery time (5%). Compared to male college students, female college students were significantly more likely to research price (t=1.264, p<.05), product selection (t=1.755, p<.001), and shipping costs (t=1.316, p<.01).

**Reasons for Not Purchasing a Product Online.** When asked about the reasons for not purchasing online, college students primarily reported the inability to try the product first (35%) and inability to receive the product quickly (16%). Other reasons for not purchasing online were product was too expensive (10%), obtained a better price elsewhere (8%), could not find the right product (4%), inconvenient to return (3%), inability to interact with person (6%), expensive shipping and handling costs (12%), lack of trust in Internet (13%), lack of trust in US mail (2%), preference of store over Internet (3%), and desire to negotiate price (1%).

The reasons reported for not purchasing a product online also differed significantly between male and female college students. Male college students were significantly more likely to prefer a store over the Internet (t=-1.309, p<.01), particularly for certain types of products (t=-1.125, p<.05). In addition, male college students were significantly more likely to dislike waiting for a product (t=-1.157, p<.05) and want to negotiate a better price (t=-1.151, p<.05). Female college students were significantly more likely to avoid purchasing online due to lack of personal assistance (t=1.592, p<.001), inability to find the right product (t=1.062, p<.05), high shipping and handling costs (t=1.168, p<.05), and high prices (t=2.037, p<.001).

**Reasons for Selecting a Non-Internet Purchase Source.** After researching products over the Internet, the majority (76%) of the college students reported purchasing the product at a non-internet source, with retail stores being the most cited purchase source by 66% of the respondents. Reasons given by college students for purchasing the product at a non-internet source included desire to try the product first (26%), ability to receive a better price (17%), desire to obtain the product quickly (15%), desire for convenience (12%), desire to avoid shipping and handling costs (11%), lack of trust in Internet (7%), desire for personal assistance in store (6%), desire to support local stores (3%), preference of store over Internet (3%), presence of in-store promotion (3%), ability to return product easily (2%), and desire to negotiate price (2%).

The reasons reported for purchasing from a non-internet source differed significantly between male and female college students. Male college students were significantly more likely to prefer a store over the Internet (t=-1.309, p<.01) and
purchase from a non-internet source in order to obtain the product more quickly ($t=-1.963$, $p<.001$) and negotiate the price ($t=-1.644$, $p<.001$). Female college students were significantly more likely to mistrust the Internet ($t=1.068$, $p<.05$) and purchase from a non-internet source in order to avoid shipping and handling costs ($t=1.550$, $p<.001$) and have the ability to easily return the product if necessary ($t=1.239$, $p<.05$).

**Product Returns.** Female college students are significantly more likely to return a product purchased online ($t=2.505$, $p<.001$), primarily because the product does not fit ($t=2.603$, $p<.001$) or is poor quality ($t=1.239$, $p<.05$).

**DISCUSSION**

Generation Y is an important consumer group that will be a large determinant in the success of online retailers in the future. Members of this generation are more technologically savvy and have been more comfortable using the Internet for a variety of purposes, including online shopping. The majority of college students are members of Generation Y and heavy users of the internet in general. While this group has been the subject of studies regarding internet usage for academic and educational purposes, studies observing internet usage for shopping purposes, as well as studies involving the gender differences in internet usage for shopping purposes, have been limited. The findings of this study provide some insight into the online shopping behaviors of Generation Y college students. Both male and female college students use the Internet to research products and purchase products. However, male and female college students differ significantly in the types of products they research and purchase online.

When researching products online, the Internet serves as a useful information source for college students in the consumer decision making process. By researching products on the Internet before purchasing them, college students are able to make educated purchases regarding price and product information, and minimize purchase risk by reading customer reviews about the products they are interested in. By comparing price, shipping costs, selection, availability, and delivery time, college students are also able to determine which outlet to use when making the purchase decision. Researching the price of a product before purchasing it gives the students a reference price so they know what to expect to spend for a product when purchased in a store. Female college students were more price-conscious than male college students, researching products on the Internet based on price, shipping costs, and product selection.

After researching products online, the vast majority of college students purchased the items at a non-internet source, primarily at traditional bricks and mortar retail stores. There were a variety of reasons for this decision, but the most common reason expressed by college students was the desire to try the product first. Male and female college students differed in their reasons for purchasing from a non-internet source. Male college students preferred to purchase from a store, negotiate the price, and receive the product quickly. Female college students did not trust purchasing over the
Internet, wanted to avoid shipping and handling costs, and wanted to be able to return the product easily if necessary.

When college students were asked why they did not purchase a product on the Internet, the most common reason cited again was the desire to try the product first. Male and female college students differed in their reasons for not purchasing a product online.

Male college students did not like to wait for a product to be delivered, wanted to negotiate a better price, and preferred a store over the Internet for certain types of product purchases. Female college students wanted to receive more personal assistance in the shopping process, and wanted to avoid high prices and high shipping and handling costs.

Male and female college students differed in the types of products purchased online. Female college students were more likely to shop online to purchase items such as clothing, books, jewelry, toiletries, flowers, crafts, and travel. Male college students preferred to shop online to purchase sporting goods, electronics, car parts, games, food, music, magazine subscriptions, tools, toys, appliances, and motorcycles. When dissatisfied with a product purchased online, female college students are more likely to return the product.

**SUMMARY AND CONCLUSION**

Research on gender differences in online purchasing behavior among Generation Y college students has been limited despite the importance of this consumer group. As Generation Y enters the work force their purchasing power and willingness to purchase products online will largely influence the future success of online retailers. This study provides insight into the online research and purchase habits of Generation Y consumers, as well as the gender differences that exist in online shopping behavior. Information is provided that explains why certain products are not purchased over the Internet, what other non-Internet sources were chosen for the actual purchase, and why products that were purchased online were returned. The results of this research provide online retailers with a better understanding of the online purchase behaviors of this consumer group, as well as useful information for online retailers that use gender-based strategies to segment their consumer market.

This study is intended to serve as a starting point for future research by addressing Generation Y internet behavior in an exploratory manner. A limitation of this research that should be noted is that the initial study was exploratory and used open ended questions. In some instances, the respondents may use different words to describe the same products. As a result, some answers are left to the interpretation of the researcher. Still, this method provides useful product information that can be transferred to a structured quantitative questionnaire with predetermined product categories for future respondents to select from. Another limitation is that the self-
reported answers required the respondents to rely on their memory and some products purchased and/or researched on the Internet may have been omitted as a result. Future research on this topic would benefit from distinguishing between shopping at a retail website but purchasing from the same retail store versus shopping at a retail website but purchasing at a different retail store. This information may shed light on the effectiveness of a website as an information search tool prior to actual product purchase, but would also provide insight into how often a retailer loses the actual sale after a customer visits the store’s website.
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