Generation Y Consumers and Online Shopping: Investigating Gender Differences in Trust, Experience and Shopping Channel Preference

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GENERATION Y CONSUMERS AND ONLINE SHOPPING: INVESTIGATING
GENDER DIFFERENCES IN TRUST, EXPERIENCE AND SHOPPING CHANNEL
PREFERENCE

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ABSTRACT

This study focuses on Generation Y as consumers and examines gender differences in online trust, shopping channel preference, online shopping experience, as well as Internet-related technological experience. The findings are based on a large scale survey and the results suggest significant gender differences. Women tend to perceive lower levels of trust towards online purchasing than men, exhibit less experience in online shopping and Internet related technologies, and choose the Internet as their preferred shopping channel less often than men do. Assessment of the relative impact of these variables in discriminating between the genders revealed that technological experience was the most important discriminant, followed by shopping channel preference, online trust and online shopping experience.
INTRODUCTION

The Internet is a phenomenon that is changing, and already has changed, the way marketing is conducted. The current shift towards relationship marketing and the interactive nature of the Internet provide new opportunities for companies in planning and implementing their marketing strategies. In recent years, an emerging area of research focusing on e-commerce has evolved. However, according to Brown et al. (2003), the literature examining electronic commerce tends to focus on discussing the size and potential of the phenomenon, or problems associated with it. There is need for research into consumer motivation to purchase via the Internet and other aspects of consumer behavior in the context of e-commerce (Donthu and Garcia 1999; Hagel and Armstrong 1997; Korgaonkar and Wolin 1999). Two important areas where further research is needed are research discussing gender in the context of e-commerce, and research focusing on particular segments and cohorts of the market.

Generation Y – Definitions and Characteristics

Generation cohorts are argued to share a common and distinct social character shaped by their experiences through time (Schewe and Noble 2000). Generation Y consumers are the children of the “Baby Boomers” generation or “Generation X” (Herbig et al. 1993). There is slight disagreement in the literature in terms of the age range, however, for the purposes of this study it was decided to define this generation as consisting of those consumers born between the years 1977 and 1994 (e.g., Bakewell and Mitchell 2003; Gill 1999).
According to Newborne and Kerwin (1999), in the USA alone there are approximately 60 million Generation Ys, and also in the UK the number of 15-21 year olds is growing (Baker 2000). However, despite the size and growth of this cohort, there is lack of empirical studies that specifically focus on Generation Y. Generation Y is believed to have unique characteristics that are different from preceding generations (Wolburg and Pokrywcynski 2001). For example, Bakewell and Mitchell (2003) argue that due to the technological, socio-cultural, economic, and retail changes during the past decades, this generation will hold differing attitudes, values and behaviors in terms of shopping compared to earlier cohorts. This makes understanding the behavior and aspirations of Generation Y consumers particularly important. Generation Y cohort has been growing up with the Internet, and has been exposed to the Internet in their daily life from early on. In addition, many Generation Y shoppers will show a recreational shopping style, having been socialized into shopping as a form of leisure, as opposed to a simple act of purchasing (Bakewell and Mitchell 2003).

Generational Analogies across Borders

Although Generation Y is an American definition, and although some differences do exist, it is possible to draw generational analogies across borders (Paul 2002). The generational labels are also widely used in the UK. Population and demographic statistics are relatively similar in both countries, and the two countries are also similar in various cultural dimensions. The study by Dutch organisational anthropologist Hofstede distinguished five cultural dimensions, including power distance, uncertainty avoidance, masculinity-femininity, individualism-collectivism, and long-term time versus short-term time orientation, and the scores of UK and US only vary slightly on these five dimensions (Hofstede 1980, 1997).
Generation Y and Gender

According to previous studies, men and women differ in terms of consumer behavior. Gender is a key variable for marketing analysis, and this study moves the emphasis from traditional settings to the context of e-commerce and online shopping. This study investigates gender-based differences in the attitudes towards and adoption of online shopping among Generation Y consumers. Do gender-based differences still exist among Generation Y consumers? This is an interesting question, especially as it is argued in the literature that even though the biological differences between genders persist, socialization differences between genders may eventually diminish, as gender-neutral roles continue to develop (Darley and Smith 1995).

LITERATURE REVIEW

Generation Y Shopping Patterns and Gender Differences in Shopping

Herbig et al. (2003) argue that each segment seems to become more conspicuous in its consumption compared with previous cohorts, and the same will apply to Generation Y. In addition, this generation has greater disposable income than previous generation cohorts (Tomkins 1999). In their study of female Generation Y consumer decision-making styles Bakewell and Mitchell (2003) found that Generation Y shoppers are likely to show a materialistic and opulent lifestyle. According to the authors, these results may indicate that adult female Generation Ys enjoy shopping more than previous age cohorts do. Finally, the authors found that many Generation Ys would show consumer confusion or behavior to cope with over-choice, such as apathy or brand loyalty.
Gender in this study is operationalized as a binary construct: male or female. It is viewed as both a biological and a sociological process (Babin and Boles 1998). According to Buttle (1992), shopping is a scene where gender-role orientations are enacted. Women tend to do the majority of shopping for the family and purchase products such as groceries and clothing, while men tend to be specialist shoppers, purchasing products such as insurance, camping gear, and outdoor goods. According to previous studies, men and women differ in terms of consumer behavior, for example in their responses to advertising and product positioning, and products they tend to buy (Buttle 1992; Fischer and Arnold 1990). Zeithaml (1985) found that even for the same products men and women exhibit different shopping patterns. Women are generally thought to be more involved in the purchasing sequence (Davis 1971; Wilkes 1975). In the study by Slama and Taschian (1985), women were found to have higher levels of purchasing involvement, thus supporting this theory. Further, men and women are subjected to different social pressures due to the occupation of different social roles (Darley and Smith 1995). According to Wood (1998), women traditionally spend more of their time shopping than men, seem to enjoy it more, and are more likely to comparison shop. Braus (1993) also argues that women tend to spend more of their income on shopping than men do.

Several explanations for these gender differences have been offered in the literature ranging from biological and sociological to trait-based explanations (Fischer and Arnold 1994). For example, Moschis (1985) argues that women generally receive more purposive consumer training from parents than men. Research also shows that women exceed men on a cluster of traits variously called socio-emotional, expressive, and interpersonally oriented, while men exceed women on traits that are task-oriented, instrumental, and agentic (Costa et al. 2001; Taylor and Hall 1982). According to Moschis (1985), men and women are also likely to have differential communication
and interaction with various social agents. A variety of biological differences are also mentioned in the literature. For example, women seem to do better at decoding verbal cues than men (Hall 1984; Everhart et al. 2001), give different weights to the salient attributes (Fischer and Arnold 1994; Holbrook 1986) and information sources (Meyers-Levy 1988) when evaluating products.

Shopping Channel Preference and Gender

Following the theory by Becker (1965), assuming a two-channel system, one traditional retailer and one direct marketer, consumers will switch between channels when utilities derived from using one channel relative to the costs involved outweigh the same for an alternative channel, subject to the full income and capital constraints. In the context of e-commerce, according to Alba et al. (1997), there are many factors that influence a consumer’s decision to shop online rather than in-store. The most important benefit relates to consumer’s information acquisition and processing. Consumers are enabled to locate and select merchandise that satisfies their needs, because the cost of information search for the attribute information is lower.

In previous studies Internet shoppers have been found to be younger, of higher income than the non-shopper, and more likely to be male. The Internet shopper has also been described as innovative, variety seeking, and less risk averse (Donthu and Garcia 1999; Korgaonkar and Wolin 1999). According to the Department of Commerce (2002) US Web use is evenly split between genders. However, Sheehan (1999b) argues that as Web use by both men and women grows further, it is becoming clear that the genders use the Web differently. There are differences in perceptions of Web advertising (Schlosser et al. 1999), usage patterns (Weiser 2000), as well as online privacy concerns and behaviors (Sheehan, 1999b).
According to Weiser (2000), women are more likely to use the Web for interpersonal communication purposes, while men are more likely to use it for entertainment, shopping, and functional purposes such as research. In the study by Wolin and Korgaonkar (2003), men exhibited a greater likelihood to make Web purchases than women. The authors argue, that although men are more likely to make web purchases than women, women could be more likely to use the shopping sites for enjoyment and information gathering, and then purchase in more traditional settings. One of the key findings of the study by Bakewell and Mitchell (2003) was that shopping is a form of leisure activity and enjoyment for adult female Generation Ys.

As many consumers have already made at least one or two purchases online, one of the aims of this study is to investigate gender differences in the tendency to be an “Internet Shopper” instead of a “Store Shopper”. Although it can be argued that consumer preference to shop online or to shop in stores also depends on the particular product or service category involved, the focus of this study is consumer’s general inclination to prefer either online shopping or shopping in stores over a range of product and service categories; in other words, to determine their overall shopping channel preference.

Online Trust and Gender

Smith et al. (1999) argue that the spatial and temporal separation between buyer and seller increases the importance of trust. Similarly, Kolsaker and Payne (2002) suggest that the lack of physical presence, huge availability of information, ease of access and transparency in the online environment highlight trust issues. Publicity regarding security breaches and difficulties in international litigation further emphasize the importance of trust. If consumers are to be
encouraged to do business with Web vendors, it is clear that they must understand how the characteristics of the virtual world affect consumer trust and commitment (McKnight and Chervany 2001-2002). For example, Hoffman et al. (1999) highlight the need for firms to develop trust-based strategies to build positive relationships with customers.

Kolsaker and Payne (2002) argue that despite increasing familiarity, consumers do not feel they can trust online shopping. In their exploratory study, the percentage of respondents who were “concerned” or “very concerned” was higher than recorded in previous studies, suggesting that overall levels of concern may actually be rising. This could be a result of high-profile security breaches. Pope et al. (1999) suggest that there is an element of perceived risk in purchasing via the Internet. Before deciding whether to trust, consumers must first determine how much risk is involved. Trust and risk have a reciprocal relationship (Rousseau et al. 1998). Trust enables consumers to take risks (Ratnasingham 1998), and an outcome of trust building is a reduction in perceived risk (Mitchell 1999).

The high levels of risk associated with non-store purchase are already well established (Cox and Rich 1964; Spence et al. 1970), and online purchasing is associated with particular risks such as outcome uncertainty. Tan (1999) suggests that risk aversion and Internet purchasing tendency are closely correlated. As consumers perceive Internet shopping to be of higher risk than in-store shopping, only those who are less risk averse are likely to shop online. Thus perceived risk associated with online shopping negatively affects consumer purchase intentions (McKnight at al. 2002). Studies by Sheehan (1999) and GVU (1998) discerned gender-based differences in attitudes towards the use of computers and online shopping. These studies demonstrate that
women display higher levels of concern than men, for example in terms of confidentiality and privacy issues.

Online Experience and Gender

The literature also suggests that past experience of Internet shopping influences future purchase intention (Jevons and Gabbot 2000; Park and Jun 2003). This is illustrated in Ba’s (2001) study of online banking, showing that online shoppers, who have more information about this kind of banking, perceive the risk involved in online transaction to be less. Contradictory findings are presented by Jarvenpaa and Tractinsky (1999), who found that Finns, despite being more experienced Web shoppers than Australians, exhibited lower levels of trust towards online shopping, and therefore lower levels of online purchase intention. Similarly, Hoffman et al. (1999) argue that as negative perceptions of security and functional barriers to online shopping are reduced, concerns about control over personal information increase.

The demographics of online population are beginning to resemble those of the mass market, becoming more middle class, more female, and older, moving away from being mainly young, male, highly educated, and affluent, as was the case in the early years of the Internet. Due to the other demographic factors of the target group in this study being relatively similar, for example, in terms of age and education, the relationship between experience and gender can easily be examined. The general view regards men as being more experienced in online shopping and the underlying technology. However, as Generation Y consumers have been exposed to the Internet from an earlier age than previous generations, it is important to examine whether there are still
significant gender-based differences in online shopping experience and experience with the technology.

**HYPOTHESES**

The following hypotheses are examined in this study:

**H1:** There is a significant relationship between gender and shopping channel preference: Men are more likely to prefer the Internet to stores as their general choice of shopping channel than women.

**H2:** There is a significant relationship between gender and online trust: Women are less trusting towards online shopping than men.

**H3:** There is a significant relationship between gender and online shopping experience: Men exhibit higher levels of online shopping experience than women.

**H4:** There is a significant relationship between gender and technological experience: Men exhibit higher levels of experience in Internet related technologies than women.

In addition, the relative importance of each independent variable in discriminating between groups (men and women) is examined.

In the model depicted in Figure 1, the box on the left represents gender and the four boxes on the right represent the four variables under investigation of gender-based differences.
METHODOLOGY

Data Collection

Data was collected using an online questionnaire, consisting of demographic, attitudinal, and behavioural questions. The questionnaire was emailed to the student population of undergraduate and postgraduate students at a large British university, using probability sampling methods. The email contained a link to the survey located on an official university research web site, and respondents completed and submitted the questionnaire online. After filtering out those not belonging to the target generation, the survey resulted in 1845 usable questionnaires, representing a response rate of more than 10%. The student sample met the conditions for this study, as respondents had access to the Internet as well as the necessary understanding and skills to complete the online survey.

Target Population

According to Wolburg and Pokrywczynski (2001), Generation Y can be broken down into subgroups, for example on the basis of age or life stage. University students are a large subgroup of this generation. However, although comprising 25% to 30% of all web users, they are the most elusive target group to market (Cannon 1999). A study conducted by Greenfield online found that university students are active online shoppers with 81% having made a purchase online (Pastore 2000). Han and Ocker (2002) argue that most students are dissatisfied with their shopping
experience in campus towns, and even tend to make day trips or weekend trips to neighbouring cities purely for shopping, making it worthwhile to target university students for online shopping. Further, university students have easy access to computers and to the Internet; they automatically receive an email address when registering for a university course, and overall are computer dependent. University students are likely to be the future money-makers, and they can potentially become lifetime brand-loyal customers (Han and Ocker 2002). Finally, as university students tend to be innovative consumers, their attitudes and purchasing patterns can help to shed light to the future behaviour of other groups of consumers.

Sample Profile

Although it was not a requirement that respondents had previously purchased online, the vast majority had previously made at least one or two online purchases. The sample comprised 933 males and 912 females, and the median age of the respondents was 20.36 years.

ANALYSIS AND RESULTS

Data was analysed with the help of SPSS Release 11.0 for Windows. Independent variables online trust, online shopping experience and technological experience were measured on a five-point Likert Scale. Principal Component Factor Analysis with orthogonal Varimax rotation was used to reduce the original set of variables into a smaller set of composite variables. Individual items which correlated less than 0.3 with a factor were omitted from consideration (Bryman and Cramer 2001). Independent variable shopping channel preference was a categorical variable. It was possible to include it in the analysis via dummy-variable coding.
Table 1, which shows the group means for both the female and male subgroups, provides initial profiling of the differences along the set of independent variables. This table indicates that the male respondents are more experienced both in terms of online shopping and technological experience, demonstrate higher levels of trust towards online shopping, and prefer online shopping to stores more often than the female respondents.

Table 2 shows the percentages of men and women preferring the Internet as opposed to stores as their overall preferred choice of shopping channel. The table highlights the very clear difference between the genders.

Due to the non-metric dichotomous binomial nature of the dependent variable, two-group discriminant analysis was deemed an appropriate multivariate tool. The necessary conditions for discriminant analysis were met. A discussion of these conditions can be found in Hair et al. (1998). The relative importance of each independent variable in discriminating between the groups was determined based on discriminant weights, loadings for the function, and the F values. As Hair et al. (1998) suggest, the emphasis was on loadings, with values of +/- .30 or higher seen as substantive. The standardized canonical function coefficients indicated that three out of 4 variables, with the exception of online shopping experience, had substantive discriminating powers between the two groups, and all four discriminant loadings proved to be substantive.
The discriminant function was significant in discriminating between men and women in terms of the four variables under investigation, and the canonical correlation of 0.430 indicated that the function coefficients and the groups were highly correlated. The overall proportion of correct classifications was 69.1%, demonstrating the success of the discriminant function in predicting group membership.

DISCUSSION AND CONCLUSIONS

Following the discriminant analysis, the four research hypotheses were confirmed, as each of the variables under investigation demonstrated a significant relationship with gender. Stepwise discriminant analysis was used, and all of the four variables were entered in the function. With stepwise procedure, the criteria specified for the technique prevent non-significant variables from entering the equation (Hair et al. 1998). Further, an analysis of discriminant loadings demonstrated that all four values were higher than +/- .30.

Firstly, gender-based differences in shopping channel preference were examined. Hypotheses 1 was confirmed, as there was a significant relationship between gender and shopping channel preference. Significantly more men than women preferred the Internet as their general choice of
shopping channel. The second hypotheses was also confirmed, as there was a significant relationship between gender and trust towards online shopping, with women exhibiting lower levels of trust towards the medium than men. Furthermore, both experience with online shopping as well as technological experience, referring to the experience with computers and the Internet in general, demonstrated significant relationships with gender, confirming hypotheses 3 and 4.

The second part of the analysis consisted of analysing the relative importance of the four variables shopping channel preference, online trust, online shopping experience and technological experience in discriminating between the genders. The strongest discriminant was technological experience, followed by shopping channel preference and online trust (referring to perceived trustworthiness of the medium). Online shopping experience was the least important variable in terms of its discriminating power.

Gender is a measurable and assessable variable and therefore these findings offer straightforward application. The results indicate that in online shopping the gendered attitudinal and behavioral patterns are similar to the patterns in more traditional settings. An interesting result is that men are more likely to prefer Internet as their general choice of shopping channel than women. This could be partly explained by the possibility of men finding more relevant categories on the Internet than women, and exhibiting higher levels of involvement with product categories particularly suitable for online shopping. Gender differences in online shopping experience were not as extensive. However, as women tend to be more selective in terms of products and services they buy online and may find fewer relevant categories on the Internet, their experience may be limited to particular categories.
RESEARCH LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

It has been argued that not all biological males or females depict sociological male or female beliefs, attitudes and behaviours (e.g., Wolin and Korgaonkar 2003). Individuals may possess varying levels of masculinity or femininity regardless of gender, and there are likely to be individual differences not accounted in the study. However, this study does support the notion that there are significant gender-based differences in shopping, and that online shopping is not different in this respect than more traditional settings for shopping. The degree to which education affects the purchasing of Generation Y is uncertain (Bakewell and Mitchell 2003). However, as the large majority of this cohort attends higher education, this limitation only becomes a problem when generalizing to other less educated Generation Y consumers.

The nature of this study is exploratory, and the focus is on gender differences in selected variables associated with online shopping, such as experience, trust, and channel choice. Future research efforts could expand on this study by investigating consumer’s shopping channel preference for different product categories among generation Y consumers. This is particularly important, as certain product and service categories are more suitable for online shopping, and it is argued that interest in a specific product or service category motivates information search and online shopping for that category.

Finally, there is need for research examining the relative importance of gender in online shopping adoption compared to other variables not included in this study. The role of gender could be examined as a moderator or a direct antecedent for a variable such as shopping channel preference.
REFERENCES


Tomkins, R. (1999), “Step forward Generation Y: advertisers are adopting alternative tactics to 
try to appeal to today’s teenagers,” The Financial Times, 28 December, p. 11.

Weiser, E.B. (2000), “Gender differences in Internet use patterns and Internet application 
167-78

Wilkes, R.E. (1975), “Husband-wife influence in purchase decisions – a confirmation and 

College Students,” Journal of Advertising Research, September/October.

and behaviour,” Internet Research: Electronic Networking Applications and Policy, Vol. 13, 
No. 5, pp. 375-385.


Vol. 49, Summer, pp. 64-75.
<table>
<thead>
<tr>
<th>Gender</th>
<th>Variable</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>1. Experience with technology</td>
<td>3.61</td>
<td>0.65</td>
</tr>
<tr>
<td></td>
<td>2. Experience with online shopping</td>
<td>3.04</td>
<td>1.12</td>
</tr>
<tr>
<td></td>
<td>3. Online trust</td>
<td>3.08</td>
<td>0.68</td>
</tr>
<tr>
<td></td>
<td>4. Shopping Channel Preference</td>
<td>1.90</td>
<td>0.30</td>
</tr>
<tr>
<td>Male</td>
<td>1. Experience with technology</td>
<td>4.09</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td>2. Experience with online shopping</td>
<td>3.55</td>
<td>1.13</td>
</tr>
<tr>
<td></td>
<td>3. Online trust</td>
<td>3.50</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td>4. Shopping Channel Preference</td>
<td>1.63</td>
<td>0.48</td>
</tr>
</tbody>
</table>
### TABLE 2

SHOPPING CHANNEL PREFERENCE

<table>
<thead>
<tr>
<th></th>
<th>I prefer shopping online</th>
<th>I prefer shopping in stores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>37.4%</td>
<td>62.6%</td>
</tr>
<tr>
<td>Females</td>
<td>10.0%</td>
<td>90.0%</td>
</tr>
<tr>
<td>Total</td>
<td>23.7%</td>
<td>76.3%</td>
</tr>
</tbody>
</table>

Note. – Percentage of Respondents in each category.
TABLE 3
SUMMARY OF THE RESULTS OF THE DISCRIMINANT ANALYSIS

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Standardized discriminant weights (discriminant coefficient)</th>
<th>Discriminant loading (structure correlation)</th>
<th>F</th>
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<tbody>
<tr>
<td>Experience with the Internet and underlying technology</td>
<td>.654</td>
<td>.770</td>
<td>107.492</td>
</tr>
<tr>
<td>Experience with online shopping</td>
<td>-.212</td>
<td>.483</td>
<td>8.571</td>
</tr>
<tr>
<td>Online trust</td>
<td>.376</td>
<td>.618</td>
<td>33.906</td>
</tr>
<tr>
<td>Shopping channel preference</td>
<td>-.510</td>
<td>-.719</td>
<td>73.683</td>
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TABLE 4
SUMMARY OF THE DISCRIMINANT FUNCTION

<table>
<thead>
<tr>
<th>Function</th>
<th>Eigenvalue</th>
<th>Canonical correlation</th>
<th>Wilks’ lambda</th>
<th>df</th>
<th>Chi-square</th>
<th>Significance</th>
<th>% correctly classified</th>
</tr>
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<tr>
<td>1</td>
<td>.220</td>
<td>.425</td>
<td>.819</td>
<td>4</td>
<td>356.834</td>
<td>.000</td>
<td>69.1</td>
</tr>
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TABLE 5

FUNCTIONS AT GROUP CENTROIDS

<table>
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<tr>
<th>Functions at Group Centroids</th>
<th>Function 1</th>
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</thead>
<tbody>
<tr>
<td>Male</td>
<td>.466</td>
</tr>
<tr>
<td>Female</td>
<td>-.472</td>
</tr>
</tbody>
</table>
FIGURE 1

RESEARCH HYPOTHESES

GENDER: MALE VS. FEMALE

SHOPPING CHANNEL PREFERENCE: INTERNET VS. STORES

ONLINE TRUST

ONLINE SHOPPING EXPERIENCE

TECHNOLOGICAL EXPERIENCE