# Assessing Women's Apparel Shopping Behaviour on the Internet ALAN HIRST and OGENYI OMAR

# Abstract

This investigation evaluates women's attitude as an overall inclination towards apparel shopping online via email questionnaire. Its findings suggest that women generally show positive attitudes towards shopping online for apparel. Women who shop for apparel online are aware of some of the discouraging features of online shopping, but these features do not deter them from buying online. The implication for online retailers is that they should focus on making the experience of online shopping more accommodating and more user-friendly. This is important because the positive features of online shopping ('convenience', 'usefulness', 'ease of use', and 'efficiency') appear to be more important than the negative features ('lack of security', 'privacy of information' and 'online fraud').

## Key terms

Apparel shopping, online shopping, Women's attitudes, online shopping behaviour

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## Introduction

The expansion of online shopping since the 1990s has dramatically changed the shopping process in the UK retail market environment (Hengst, 2001). The purchase of apparel and related products online are increasing despite sceptical consumer attitudes regarding security. The percentage of the Internet users reporting they have purchased clothing online has grown rapidly over the past decade (Pastore, 2000). As Park and Stoel (2002) observed, in spite of the rapid growth in online sales of apparel in the UK, some consumers are reluctant to shop for clothing on the Internet. Some of the major hindrances expressed by consumers for not using the Internet are associated with the risks of not being able to try garments on, feel the fabric, and read product information on labels relating to care and content labels (Lee and Johnson, 2002). Lack of credit card security and poor product quality were some of the major problems women associated with apparel purchasing on the Internet (Fram and Grady, 1995).

The demographic profile of online shoppers is constantly changing, however according to Yorgey, (2000) the typical profile of an online shopper is more likely to be male, well educated, married, with a high economic status. However, as Coyle (2000) forecasted, 'once the domain of men, online shoppers of the twenty-first century are just as likely to be women as they are to be men' (see also Forrester, 2000). Although PricewaterhouseCoopers (2000) reported that online apparel purchases were most likely to be made by women under the age of 35 years, information regarding the attitudes, behaviour and reasons for women buying apparel online remains to be explored.

The main objectives of this study were (i) to explore individual characteristics of women online apparel shoppers; (ii) to assess whether these women characteristics induce apparel shopping online; and (iii) to investigate whether differences exist among online women apparel buyers and non-purchasers on the basis of attitudes, usage behaviour and demographic characteristics. The justification for this study is that an understanding of what causes online purchase differences among women apparel consumers which is valuable not only to online retailers responsible for implementing and developing online services, but also to researchers interested in explaining women's online apparel purchase intentions. The rest of this paper is structured as follow: we review the current literature and develop a theoretical underpinning. We

then construct a research framework and data collection. This is followed by data analysis and the discussion of the findings. Managerial implications and future research directions are suggested.

## Literature Review

The rapid expansion of the Internet since the 1990s has dramatically changed the way British consumers shop (Hengst, 2001). The monetary value for Internet-related shopping will continue to grow (eWeek, 2005). In the business-to-business sector (Forrester Research, 2000), Internet technology facilitates numerous changes in corporate infrastructure in information exchange, procurement, and the distribution process. While the business sector accounts for most of the value of Internet-related business (Monsuwe, et al., 2004), rapid growth in the retail sector is pushing retailers to tap into the virtual business environment. Meanwhile, with assistance from the latest development in retail marketing communication (Omar, 2005) and information technology (Monsuwe et al., 2004) online retailers are rushing to establish positions in newly identified niches in an attempt to gain competitive advantages. One distinctive advantage for online retailers is the ability to reach a large number of consumers scattered around various geographic locations, particularly in hard-to-reach areas, in a short period of time (Strauss and Frost, 1999). As Schlosser et al., (1999) observed, adding Internet advertising to the promotional mix has become a common strategy used by marketers and fashion retailers (see also Monsuwe et al., 2004).

# **Shopping Online**

The two most commonly cited reasons for shopping online (Haubl and Trifts, 2000) have been price and convenience. The ability to shop online without leaving the home and to have the products and/or services delivered to the door is of great interest to many shoppers (Lynch and Beck, 2001).

The number of Internet users who are shopping online goods and services is increasingly (Forrester Research, December 2001). In order to be able to identify what factors affect consumers to shop online, a framework is needed to structure the complex system of effects of these different factors, and develop an in-depth understanding of consumers' attitudes toward Internet and their intentions to shop online (Monsuwe et al., 2004). According to Davis (1993) consumers' attitudes regarding Internet shopping are depending on the direct effects of relevant online shopping features. Online shopping features can be classified into consumer's perceptions of functional and utilitarian dimensions such as "ease of use" and "usefulness", or into their perceptions of emotional and hedonic dimensions like "enjoyment" (Benedict et al., 2004). Also exogenous factors like "consumer traits", "situational factors", "product characteristics", "previous online shopping experiences" and "trust in online shopping" are considered that moderate the relationships between the core constructs of the framework (Monsuwe et al., 2004).

Monsuwe et al., (2004) also state that by incorporating these exogenous factors next to the basic determinants of consumers' attitude and intention to use a technology, the framework is applicable in the online shopping context. Additionally, for women who are not certain about which products best serve their needs the Internet has become a convenient and rich source of information for product comparisons (Schlosser, et al., 1999). Compared with traditional brick-and-mortar retailers, online retailers offer extensive product information on demand (James, 1999). On the other hand, privacy and security have been of great concern for online shoppers (Yianakos, 2002).

# **Online Shopping Motives**

In general terms, motivations of consumers to engage in online shopping include both utilitarian and hedonic dimensions (Schlosser, et al., 1999; Venkatesh, 2000; Xu and Paulins, 2005). According to Holbrook (1994), while some Internet shoppers can be described as 'problem solvers', others can be regarded as seeking 'fun, fantasy, arousal, sensory stimulation, and enjoyment'. The problem solvers merely shop online in order to acquire a specific product or service, in which case shopping is considered to be 'a task' or 'work' (see Babin et al., 1994). The main concern of problem solvers is to purchase products in an efficient and timely manner to achieve their goals with a minimum of irritation. In contrast, other consumers may see online shopping as 'enjoyment' and seek the potential entertainment resulting from the fun and play arising from online shopping experience. They appreciate the online shopping experience for its own sake, apart from any other consequence such as an online purchase that may result (Holbrook, 1994). This dual characterisation of consumers' motivations for online shopping is consistent with the framework adopted in this study where 'usefulness' and 'ease of use' reflect the utilitarian aspects of online shopping, and 'enjoyment' embodies the hedonic dimension. The next section reviews the theoretical framework adopted for examining the factors determining and affecting the attitudes of women toward online shopping.

# **Theoretical Framework**

In order to develop an in-depth understanding of women's attitude towards online apparel shopping and their intention to shop on the internet, we adopted and modified a framework (Figure 1) based on previous research on 'consumer adoption of new technologies and services' (see Davis, 1989; Dabholkar and Bagozzi, 2002; Monsuwe et al., 2004). We defined online apparel shopping in this framework as 'the use of online stores by women up until the transactional stages of purchasing and logistics. The core constructs of this framework, though modified slightly are adapted from the Technology Acceptance Model (TAM) first developed by Davis (1989). In order to be able to understand consumers' attitudes toward online shopping a framework was built up Davis (1989) has adapted the core constructs of the framework from the Technology Acceptance Model (TAM). Despite the fact that this model is only helpful to understand the adoption of computer based technologies on the job or in the workplace, it has proven to be suitable as a theoretical foundation for the adoption of e-commerce as well (Chen et al., 2002; Moon and Kim, 2001; Lederer et al., 2000 cited in Monsuwe et al., 2004). There are two main determinants of a person's attitude toward using a new technology (Monsuwe et al., 2004); firstly, is "usefulness" which refers to the degree to which a person believes using the new technology will improve his/her performance or productivity and secondly, is the "ease of use", which it refers to the extent to which a person believes that using the new technology will be free of effort. In addition, "enjoyment" constructs, or the extent to which the activity of using the new technology is perceived to provide reinforcement in its own right, apart from any performance consequences that may be anticipated (Davis et al., 1992, cited in Monsuwe et al., 2004). Venkatesh (2000) recommended more factors in the existing technology acceptance model such as "control", "intrinsic motivation" and "emotion". Dabholkar and Bagozzi (2002) added two more exogenous factors: "situational influences" and "consumer traits" to the TAM framework.

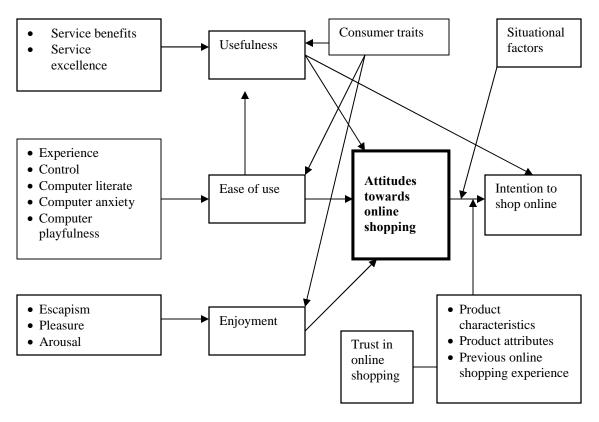


Figure1: Framework for shoppers' intention to buy apparel online Adopted and modified from Monsuwe et al., (2004)

This framework is most suitable to our investigation because the understanding of the determinants of women's attitude has both a direct and positive effect on women's intentions to actually use the Internet for apparel shopping (Davies, 1993; Bobbitt and Dabholkar, 2001).

As Venkatesh (2000) suggested, we integrated additional factors including 'control' (computer self-efficacy), 'intrinsic motivation' (computer playfulness), and 'emotion' (computer anxiety) into the existing technology acceptance model. These factors are proposed to act as significant determinants for 'ease of use' (Monsuwe et al., 2004). Dabholkar and Bagozzi (2002) introduced 'consumer traits' and 'situational influences' to the TAM framework, resulting in their attitudinal model of technology-based self-service. Although various researchers have modified the original TAM framework to suit their investigation, apart from 'ease of use', 'usefulness', and 'enjoyment', we integrated six factors for understanding women's intentions to shop online including 'consumer traits', 'situational factors', 'product characteristic', 'previous online shopping experience', 'trust in online shopping', and 'product attributes'.

# **Research Design**

There is a unanimous agreement in numerous studies that women report higher levels of computer anxiety than men (Igbaria and Chakrabarti, 1990; Brosnan and Davidson, 1996; Park and Stoel, 2002; Xu and Paulins, 2005). In the context of the Internet, gender is believed to moderate the extent and pattern of participation in online shopping activities (Gilbert, et al., 2003; Rodgers and Harris, 2003). Although, men shop more via the Internet (Lynch, et al., 2001), women remain the primary shoppers with 'brick-and-mortar stores. Since apparel shopping in the physical stores and through the catalogues is dominated by women, we therefore consider women to be suitable respondents for this investigation.

# **Data Collection**

This study consisted of two phases: a focus group phase and a survey phase. Initially, focus groups were formed for the purpose of identifying general perceptions of women with respect to use of online

shopping for apparel products. Information generated from the focus group study contributed toward questionnaire (survey) development. Ninety six (96) undergraduate female students studying business related courses in one of London universities' business school participated in focus groups that ranged in size from 6 to 9 members. Questions were generated by the researchers and posed in a consistent manner to the nine focus groups. The topics in the focus group study included prior experience with shopping online, satisfaction with shopping online, fashion orientation, and general behaviours with respect to shopping for apparel. Follow-up questions explored the underlying reasons for online shopping for apparel. Based on focus group responses, specific benefits and risks related to online shopping were identified and included in the survey instrument.

After obtaining ethical permission, three universities based in central London area were selected for generation of female postgraduate student population samples to receive the questionnaire. A selfadministered questionnaire was developed to reflect variables related to shopping for apparel online that had been identified previously through focus groups and literature review. Universities were conveniently selected in such a way that they were geographically close to the researchers. The institutional data and research offices at each of the universities generated random samples of 1,000 female postgraduate students and provided mailing lists of these identified students.

Survey design strategies developed by Salant and Dillman (1994) were used to implement dissemination of the questionnaire. Initial contact with the respondents was a personal letter informing them that they would receive a survey in approximately seven days. The letter explained how they were selected, and expressed the researchers' appreciation of their participation. A week later, the questionnaire was mailed with a pre-addressed postage paid return envelope. A post card was mailed ten days after the mailing of the questionnaire to thank those who had returned the completed questionnaire and to remind those who had not. Of the 1000 questionnaires mailed out, 248 responses were received within the cut-off period of four weeks representing 25 per cent return rate. Out of the 248 returned, 38 responses were not usable due to inaccurate completion of the questions, leaving 210 usable responses for subsequent data analysis.

## Measurements

Several question formats were presented on the survey. Many of the questions were presented so that the participants could respond on a five point Likert type scale with 1 = strongly disagree to 5 = strongly agree. Some open-ended questions were included to reflect the respondent's opinion. The survey instrument was then design to measure attitudes towards shopping online for apparel; women's intention to shop online for apparel; women's previous online experience; and women's demographic profile. Attitudes about online shopping were measured with 30 questions recorded on five-point scales. Online shopping experience was measured with the question: "How long have you been using the Internet?" Demographic characteristics were assessed in terms of age; monthly disposable income; employment; and Internet usage (see Table 1). Finally, willingness to provide credit card information (see also Lee and Johnson, 2002) online (if the price, brand quality, and retailer's reputation was acceptable) was measured with three questions on five point scales (1 = strongly disagree to 5 = strongly agree).

| Characteristics               | Purchasers<br>(n = 65) | Non-purchasers<br>(n = 145) |
|-------------------------------|------------------------|-----------------------------|
| Age (years)                   |                        |                             |
| 23-25                         | 8.4                    | 25.2                        |
| 26-30                         | 14.1                   | 33.0                        |
| 31-35                         | 18.5                   | 34.3                        |
| 36-40                         | 16.0                   | 28.3                        |
| 41 and over                   | 8.0                    | 24.2                        |
| Monthly Disposable Income (£) |                        |                             |
| Less than 500                 | 13.2                   | 16.8                        |
| 500 - 1000                    | 31.4                   | 22.6                        |

#### Table 1: Demographic Characteristics of Women Apparel Shoppers (%)

| 1100 - 1500<br>1600 - 2000<br>2100 and over | 17.6<br>12.0<br>25.8 | 24.0<br>19.6<br>17.0 |
|---|----------------------|----------------------|
| Employment Status                           |                      |                      |
| Working full time                           | 14.0                 | 6.6                  |
| Working part-time                           | 39.5                 | 47.8                 |
| Not working                                 | 28.2                 | 37.0                 |
| Family support                              | 18.3                 | 15.2                 |
| Internet Usage                              |                      |                      |
| Never                                       | 2.0                  | 15.0                 |
| Occasionally                                | 25.0                 | 39.0                 |
| Sometimes                                   | 28.0                 | 20.0                 |
| Frequently                                  | 30.0                 | 18.0                 |
| Always                                      | 15.0                 | 8.0                  |

## **Data Analysis**

In order to conduct the analysis, all the cases in the data set where identification numbers (ID) could not be traced were eliminated. The final data set produced 210 cases (n = 210) that comprised the final sample. The statistical package for the social sciences (SPSS version 12) was used to reduce the data to a manageable size. Descriptive statistics were used to determine the characteristics of the sample. In order to determine appropriateness of using factor analysis a correlation matrix of all the 30 variable items, as well as Kaiser-Meyer-Olkin's measure of sample adequacy were performed. The results support the use of factor analysis. For this process, varimax factor rotation method as suggested by Cooper and Weekes (1983) was employed. Varimax factor rotation was applied to the 30 components using the minimum eigenvalue of one as the criterion to control the number of factors extracted. Seven factors were initially extracted but finally reduced to three factors (ease of use; security; and user advantage) using varimax rotation. The three extracted factors were used as scales for measuring the different components of women's attitude towards online shopping (see Table 2). Altogether, 15 statements were retained with factor loading between 0.25–0.79 with a variance of 51.45 percent. Cronbach's alpha coefficients for the three scales ranged from 0.85 to 0.70.

## Table 2: Factor analysis of women's attitudes towards online apparel shopping

| Item  | Factor<br>loading            | Eigenvalue | Percentage<br>of variance<br>explained | Cronbach's<br>alpha |
|---|------------------------------|------------|--|---------------------|
| Ease of use   |                              | 1.55       | 7.51                                   | 0.70                |
| Shopping online is easy for me  | 0.78                         |            |  |                     |
| Shopping online is clear and understandable   | 0.73                         |            |  |                     |
| I am capable of shopping online   | 0.69                         |            |  |                     |
| Security (safety)<br>Shopping online is a safe way to shop<br>Online retailers are trustworthy<br>Shopping online is very risky<br>I don't trust the Internet service<br>providers to give personal details<br>online | 0.79<br>0.67<br>0.25<br>0.62 | 2.78       | 12.00                                  | 0.82                |
| User's relative advantage<br>Online shopping makes me feel proud<br>Shopping online improves my<br>shopping confidence  | 0.68<br>0.65                 | 4.22       | 19.65                                  | 0.85                |

| Shopping online gives me control over what I buy                        | 0.62 |
|---|------|
| Shopping online fits well with my                                       | 0.67 |
| status<br>Shopping online enables me to shop                            | 0.61 |
| very quickly<br>Shopping online is compatible with                      | 0.58 |
| my lifestyle  | 0100 |
| Shopping online allows me to get a better price                         | 0.54 |
| Shopping online enables me to view variety of other items before buying | 0.52 |

Finally, to determine if the apparel online shoppers and non-shoppers were different in attitudes about online shopping, intention to shop online and demographic characteristics, multivariate analysis of variance (MANOVA) was conducted for multiple comparisons.

# Results

In connection with demographic variables, the MANOVA ("F test") which was F = 16.84; p < 0.001) indicates that the two groups of women were significantly different with respect to demographic characteristic. The three univariate variables (Fs) were significant at p<0.01. Table 3 lists the results of the multivariate and univariate analyses of the differences between women purchasers of apparel online and non-online apparel purchasers. Women who purchase apparel online were more likely to have higher incomes compared to women who are regarded as non-purchaser. Both women purchasers of apparel online and non-purchasers were likely to have higher education levels (i.e. no significant differences were found with respect to educational levels of the respondents). Attitudes about online apparel shopping (F = 6.456; p<0.001) showed that these two groups were significantly different in their attitudes about online shopping. Univariate Fs for relative advantage and ease of use were significant at the p<0.001 level while safety was significant at the p<0.01 level. By comparison, women apparel purchasers online perceived online shopping as having relative advantages, easier to use and relatively safe than women non-apparel purchasers online.

| Table 3: Results of multivariate and univariate analyses showing differences between women apparel |  |  |  |  |
|--|--|--|--|--|
| purchasers and non-purchasers  |  |  |  |  |

| Variable  | Apparel<br>purchasers            | Apparel<br>non-<br>purchasers            | F - value                               | η²                                | F- test  |
|---|----------------------------------|--|---|-----------------------------------|----------|
| Demographics  |                                  |  |   |                                   | 16.84*** |
| Age<br>Family Income<br>Education                                   | 35.78<br>6.67<br>3.76            | 35.69<br>5.98<br>3.74                    | 11.792 ***<br>7.56 ***<br>4.69**        | 0.020<br>0.016<br>0.007           |          |
| Attitudes towards online shopping                                   |                                  |  |   |                                   |          |
| Advantage<br>Ease of use<br>Enhances status<br>Safe to use (safety) | 0.298<br>0.136<br>0.056<br>0.218 | - 0.004<br>- 0.003<br>- 0.021<br>- 0.035 | 21.32***<br>11.54***<br>3.84<br>11.52** | 0.0297<br>0.021<br>0.005<br>0.021 |          |
| Willing to provide information online                               |                                  |  |   |                                   | 3.534*** |
| Right price   | 3.12                             | 3.04                                     | 1.010                                   | 0.002                             |          |

| High quality       | 3.01 | 2.79 | 1.210         | 0.002 |
|--------------------|------|------|---------------|-------|
| Reputable retailer | 3.82 | 3.78 | $7.988^{***}$ | 0.018 |

Note: <sup>\*\*\*</sup> ρ < 0.001; <sup>\*\*</sup> ρ < 0.01

The results regarding women's willingness to provide financial and personal information online indicated that the purchasers and non-purchasers were significantly different with respect to their level of agreement to provide information online. In general, women's willingness to provide information if the retailer is trustworthy is significant at the level p < 0.001.

# Discussion

On the basis of the findings of this research, a profile of women who purchase apparel online was developed. Thus, compared to those women who do not shop for apparel online, apparel purchasers online were more likely to perceive online shopping as having relative advantages, safe, easy way to shop, and secure. Online shoppers tended to be more matured with high incomes, and are willing to provide personal information online. Women who shop online are more willing to provide credit card and purchasing information over the Internet if the retailers were deemed reliable. This finding is consistent with the findings of the previous research by Lee and Johnson (2002) that 'none apparel purchasers via the Internet were less likely to perceive Internet shopping as having relative advantages and as being safe, and they were less likely to provide financial information even if the retailers were reliable'.

In terms of attitudes towards online shopping, women who purchase apparel online were different from women who did not shop online for apparel in their attitudes. Women non-purchasers associate online shopping with high risk. The high level of perceived risk associated with online shopping is related to credit card fraud and online theft. This finding is partially consistent with the literature suggestion that a high level of perceived risk on the part of non-users of Internet was a deterrent to shopping. It is unlikely that women who do not shop for apparel online will change their attitudes and become online shoppers in the near future. These non-purchasers may only change their minds if the associated perceived risks are reduced or removed completely in the future.

In order that the online apparel retailers may effectively compete with brick-and mortar stores or other main distribution channels (catalogue), online retailers must address the factors identified in this research by providing a safe shopping environment online. They should provide information on their web sites that draws the shoppers' attention to their financial security and safeguard of personal information. They should provide information online which inform the shoppers of their advantages of using online as compared to physical retail outlets. The most important point is that online retailers must provide information which guides the shoppers by giving clear instructions on how to access the Web site without difficulty.

#### **Implication for Retailers**

Online apparel retailers need to be aware of the overall online shopping process and how various components of the apparel shopping process affect consumers' apparel shopping experience online. The importance of the 'usefulness', 'eases of use' and 'enjoyment' factors have been manifested by their strong association with overall satisfaction. It is evident from the results of this study that the quality of Internet service providers (ISPs) has a significant effect on consumers' online shopping experience, though online apparel retailers may not have control over ISPs. This complicates the task for online apparel retailers to improve the Internet shopping environment. Most online apparel retailers have incorporated an ISP into their overall Internet shopping infrastructure.

The transaction factor is an integral part of online shopping. For many consumers who buy apparel online, convenience, ease of use, security, usefulness, and value are unmistakably the fundamental benefits. Online apparel retailers need to create and maintain superior performance in various convenience and value factors to build long-term sustainable competitive advantages. Ability to conduct careful product evaluation is another distinctive advantage for virtual retailing. Apparel retail managers need to continue to provide adequate and easy-to-access product and comparison information to facilitate online transactions. Enjoyment (fulfilment) is a factor that cannot be ignored as shown in our framework. Enjoyment is an important means to improve apparel shoppers' confidence in online transactions. Finally, online shopping represents a new segment that retail management must address and develop capabilities to serve in

conjunction with brick & mortar stores in order to remain competitive and/or achieve competitive advantage.

## Limitations

Similar to several previous studies, we used self-report measures that may have made the results subject to individual differences. The patterns observed in this study may only be limited to the study sample (women who shop for apparel online). While the selection of women was convenient, the approach may limit the generality of research findings. Finally, this study, like other survey research, is subject to common limitations such as non-response error, incomplete sampling frame, and many other factors.

# **Future Research Direction**

Based on the findings of this study, future research is recommended to extend and expand its scope. Thus, the relationships between shopping values (process) and the web site attributes need to be further explored. While this study examined the attitudes of women customers, it would be interesting to explore how attitudes are related to web site attributes in different shopping contexts. Future research needs to address the measurement issue in relation to the quality of the online shopping experience and to closely investigate consumers' shopping experiences and the various factors that determine future online patronage. Based on the findings of this study, a multi-dimensional scale could be developed to include salient factors, such as value, service, security, fun, convenience, and others. Future research may examine alternative actionable strategies to improve apparel shopping experience online. Attention should also be given to potential moderators and mediators. As the Internet has become a permanent fixture in retailers' business portfolios, more research effort is needed to better understand the nature of the online shopping process and experience.

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