

Full Length Research Paper

Gender differences in adolescents' online shopping motivations

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Few studies discuss gender differences in online shopping motivations among adolescents. This study was to investigate gender differences in adolescents' online shopping motivations based on utilitarian and hedonic motivations. Utilitarian motivations consist of convenience, choice, availability of information, lack of sociality, and cost saving, whereas, hedonic motivations comprise adventure, sociality, fashion, value and authority. 639 high school students in Taiwan were selected and the result indicated that male adolescents hold significantly more positive attitudes toward online shopping on utilitarian motivations (for example, convenience, lack of sociality and cost saving) than the female adolescents whereas, female counterparts put more emphasis on hedonic motivations (for example, adventure, sociality, fashion and value) on internet consumption. It suggests that, gender differences really exist in online shopping. The study provides a direction for the further research of internet marketing.

Key words: Online shopping, gender differences, utilitarian value, hedonic value, adolescents.

INTRODUCTION

The survey of Taiwan Network Information Center (2008) indicated that the internet population in Taiwan has reached 15 million. Among them, adolescents take up large percentage. Those who use internet under the age of 20 play an important part in online population, accounting for nearly 2.86 million. For adolescents, internet plays an important role in their daily lives.

In the population of internet, some surveys indicated that male internet users outnumbered female counterparts. Internet used to be regarded as a masculine domain. Nevertheless, recent surveys point out that the gender gap has been disappearing. In addition, the numbers of male and female internet users are equal (Pew Internet and American Life, 2003). Jackson et al. (2001) noted that though young women and men use the internet equally often, they use it differently, and this may influence the motivations of buying online. Therefore, it is interesting to further discuss sex differences in online consumption. Early researchers tended to explore demo-

graphic profiles of internet buyers and functional advantages of online shopping, few stressed gender differences in online shopping behaviour. In fact, the study of gender differences has been a fertile area in marketing research, but it seems that there are few studies that explore gender differences in online buying.

In addition, many researchers tended to discuss the use of the web among adults; however, few empirical studies explored web consumption behaviour among adolescents (Hartman et al., 2004). For adolescents, shopping is not only the exchange of a product for money, but also, the construction of the self via the buying of identity (Clammer, 1992). Seeking one's identity is an important concern in this stage and adolescents become adults by making independent purchase (Gunter and Furnham, 1998).

With the development of internet, online shopping has become an important marketing medium and shopping via internet has become popular among adolescents. This trend shows that the internet has undoubtedly become a vital channel for adolescents' consumption. Adolescents use online shopping to express their identity and independence (Gunter and Furnham, 1998).

The aim of this study is to explore gender differences in

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adolescents' online shopping motivations based on utilitarian and hedonic values. Cowles et al. (2002) indicated that e-commerce research should explore the value behind consumer use. Many research tended to explore individuals' motivations to identify conceptual factors to understand retail buying behaviour; nevertheless, the motivations of on-line purchasing is comparatively less discussed. Unlike previous studies, this study focuses on how male and female adolescents differ in their motivations of online shopping. The results offer valuable insights for marketers as well as consumer behaviour researchers.

The remainder of this paper is structured as follows: The paper begins with introduction of our research background then, reviewed literature on utilitarian and hedonic values, and hypotheses were advanced. The subsequent section detailed on the research design and the development of the research instrument. Following sections presented the results of the research, followed by the discussion and implication derived from the study.

LITERATURE REVIEW

Utilitarian value

Utilitarian value is defined as mission critical and goal oriented (Hirschman and Holbrook, 1982; Batra and Ahtola, 1991). Babin et al. (1994) defined utilitarian shopping motivation as acquiring the benefit of the product needed, or acquiring the product more efficiently during the shopping process. Therefore, utilitarian shoppers are transaction-oriented and desire to purchase what they want, efficiently and without distraction (Wolfinbarger and Gilly, 2001). Utilitarian value is an overall assessment of functional benefits, such as economic value, convenience, time savings (Jarvenpaa and Todd, 1997; Teo, 2001). Previous researchers believe that, utilitarian values are the fundamental factors for people shopping online.

Utilitarian shoppers are interested in e-tailing because of four specific attributes: convenience and accessibility, selection, availability of information and lack of sociality (Wolfinbarger and Gilly, 2001). Moreover, previous research views cost-saving as an important factor for consumers to take advantage of internet shopping (Keeney, 1999). Thus, this study categorizes utilitarian value into convenience, choice, availability of information, lack of sociality, and cost saving.

Convenience

Convenience is defined as time savings and effort savings, including physical and mental effort. Convenience is a crucial attribute for consumers when shopping online. Shopping online makes it easy for consumers to locate merchants, find items, and procure offerings

(Balasubramanian, 1997). Wolfinbarger and Gilly (2001) mentioned that internet shopping provides a more comfortable and convenient shopping environment. Consumers do not have to leave their home and they can also browse for items by category or online store. Schaffer (2000) argued that a convenient internet shopping provides a short response time and minimizes customer effort.

Swaminathan et al. (1999) reported that male internet buyers were more convenience oriented and less motivated by social interaction than women internet buyers. Alreck and Settle (2002) indicated that women have more positive attitudes toward shopping, whereas, men prefer shopping via internet (Alreck and Settle, 2002). Hence, H₁: Male adolescents will report higher mean scores on convenience than female adolescents.

Choice

Wolfinbarger and Gilly (2001) indicated that conventional retailers have stock pressure, while e-retailers can avoid stock problem. Furthermore, compared with physical stores, online stores are able to provide more diversified product categories. E-retailers can supply customers with greater choice via alliances with other virtual suppliers. Shopping online represents the wider assortment of products that can be attractive to consumers. Hence, H₂: Choice is equally important for male and female adolescents when shopping online.

Information availability

Bakos (1997) postulated that the internet includes abundant public information resources that can be easily collected. For adolescents, internet is the most efficient means to get related information. The internet as a medium facilitates searching both product specifications and price information. Price is an important reference and adolescent consumers often compare price between multiple websites.

Women tend to be more sensitive to related information online than men when making judgments (Meyers-Levy and Sternthal, 1991), causing subsequent purchase attitudes and intentions presented by men and women to differ. In other words, females make greater use of cues than males. Cleveland et al. (2003) found that when making consumption decision, women seek more information than men. Hence, H₃: Female adolescents will report higher mean scores on convenience than male adolescents.

Lack of sociality

Wolfinbarger and Gilly (2001) indicated that online shopping enables people to execute a transaction without contacting others, and online buyers have more freedom

and control over the transaction. One advantage of online shopping is that online buyers can decide to buy or not and the transaction is under their control. In addition, while shopping online, it turns out that people can avoid social interaction and crowded environment.

Swaminathan et al. (1999) reported that male internet buyers were less motivated by social interaction than women internet buyers. Compared with men, women tend to enjoy shopping (Alreck and Settle, 2002), and they can have more social interactions in the process of consumption. Computer-mediated shopping does not offer women much social contact. Hence, H₄: Male adolescents will report higher mean scores on lack of sociality than female adolescents.

Cost saving

Miller (2000) indicated that the virtual online stores allow vendors to save expenditure that e-tailers enable consumers to purchase at a lower price. Moreover, it is relatively facile for internet buyers to make price comparisons via internet at any time. Chang and Samuel (2004) propose that, there is a universal trade-off between richness and reach when shoppers go to retail stores for their shopping.

Richness refers to the quality of the information available to shoppers, whereas, reach refers to the number of shops that they visit to compare product quality and prices. Computer-mediated shoppers can not only reach a broader selection of product but also acquire rich product information for efficient decision-making. Hence, H₅: Cost saving is equally important for male and female adolescents when shopping online.

Hedonic value

Hedonic value, defined as consumption behaviours that relate to fantasy, happiness, sensuality, and enjoyment (Hirschman and Holbrook, 1982), is an overall assessment of experiential benefits. Compared with conventional utilitarian shopping motivations, the merit of hedonic motivation is experiential and emotional. The reason why hedonic consumers do shopping is not for physical objective but for the shopping process instead. Research concerning hedonic motivation becomes more popular lies in two reasons. One is the obvious motivation that attracts consumers to patronize the website, the other is the fact that hedonic motivation is the extension of utilitarian motivation and these two motivations seem to become crucial factors in keeping competitive advantage (Parsons, 2002).

Many research used to adopt hedonic value dimensions to discuss in-store shopping. Nevertheless, there are more researches using hedonic value dimensions to explore online shopping. Except for the freedom to search, hedonic motivation is also an important element.

Mathwick et al. (2001) discussed the experiential value and enjoyment that should be viewed as hedonic value. Kim and Shim (2002) proposed that consumers going online are not only for information and products, but also, for emotional satisfaction. Hedonic online shoppers are accustomed to active pursuit while going online. They often browse website, search for new items and download updated information, actually they are bathed in the process of enjoyment. According to previous studies, it appears that hedonic value plays an important role in online shopping; therefore, based on Pui et al. (2007), the hedonic value in this study comprises adventure, sociality, fashion, value and authority, and they are shown in Table 2.

Adventure

Adventure refers to the fact that shopping can bring stimulation and excitement, and consumers can run across novelty and interesting affairs in the process of fantastic shopping (Westbrook and Black, 1985). Experienced consumers are inclined to view the shopping experience as thrills, excitement and amazement. Babin et al. (1994) regarded adventurous aspect of shopping as an element that may produce hedonic shopping value. Sherry (1990) addresses that in the shopping process shoppers pay more attention to sensual satisfaction rather than the product itself.

Women stress emotional and psychological involvement in the buying process, whereas, men emphasize efficiency and convenience in obtaining buying outcomes (Dittmar et al., 2004). Women tend to enjoy shopping (Alreck and Settle, 2002); shopping is undoubtedly as a fantastic journey for them.

Dittmar and Drury (2000) pointed out that shopping seems to play a psychologically and emotionally encompassing role for women than for men, whereas, men focus on the outcome to get the actual goods with the least effort. In other words, the added value attached to shopping process may play a much more prominent role for female consumers, while male consumers' primary concerns are to get the product only, shopping process may function as nothing meaningful for men. Hence, H₆: Female adolescents will report higher mean scores on adventure than male adolescents.

Sociality

Sociality, grounded in McGuire's (1974) collection of affiliation theories of human motivation, suggests that people put emphasis on cohesiveness, affiliation and affection in interpersonal relationships. Tauber (1972) indicated that shoppers are fond of affiliating with reference groups and interacting with those who have similar interests. Westbrook and Black (1985) regarded affiliation as a shopping motivation, and Reynolds and

Beatty (1999) stress on the importance of social motivations for shopping. Wolfinbarger and Gilly (2001) proposed that, virtual community is a new platform of sociality, meaning that, internet shopper can share updated information and related shopping experiences with one another. Compared with traditional social benefits from friends, virtual community furnishes shoppers with fresh pleasure.

Alexander (1947) mentioned that the experimental psychologists have developed very convincing evidence that women are more prone to social contacts than men, and reasonably convincing evidence that they have more aptitude for maintaining such contacts. Based on the results of carefully conducted aptitude and interest tests, gender differences seem to be notable. Dittmar et al. (2004) addressed that women, have a stronger desire for emotional and social gratification in the internet buying environment than men. Hence, H₇: Female adolescents will report higher mean scores on sociality than male adolescents.

Fashion

Fashion refers to the extent that consumers shop to catch up with new trends and fashions. Tauber (1972) indicated that keeping up with the latest trends, fashions and innovations is a kind of shopping motive. Parsons (2002) addresses that discovering the newest information is a crucial element for internet shoppers to use web.

Alexander (1947) proposed that women's interests are more fashionable than those of men. In addition, Chyan and Chia (2006) discover that females are dominated over perfectionism and novel-fashion consciousness than males, suggesting that females are more fashion oriented. Hence, H₈: Female adolescents will report higher mean scores on fashion than male adolescents.

Value

Value shopping, based on McGuire's (1974) collection of assertion theories that regard the human as a competitive achiever who seeks success to enhance his self-esteem, refers to the pleasure and satisfaction when shoppers search for discounts and hunt for bargains. Chandon et al. (2000) indicated that consumers would think themselves to be smarter when getting a discount.

Arnold and Reynolds (2003) depicted that getting a bargain makes consumers feel like winning the challenge, and the bargaining process is viewed as a kind of hedonic value (Babin et al., 1994). Hence, H₉: Value is equally important for male and female adolescents when shopping online.

Authority

Han and Han (2001) indicated that, internet is the best

medium relative to physical stores that provide customers with customized services, such as product specs, packaging, shipment, design and transaction method. Parsons (2002) pointed out that shoppers could determine which to buy, when to purchase and when to receive delivery via internet. Internet shopping furnishes customers with authority by controlling over computer-mediated tool.

Clammer (1992) mentioned that, shopping is not only the exchange of a product for money, but also, the construction of the self via the buying of identity. Gunter and Furnham (1998) indicated that, seeking one's identity is an important concern in youth stage, and adolescents become adults by making independent purchase. Hence, H₁₀: Authority is equally important for male and female adolescents when shopping online.

The differences between men and women really exist, including physical and mental differences. The differences drew marketing researchers' interest that brought out related studies, such as gender differences in decision-making styles (Vincent and Walsh, 2004), attitudes toward internet and store shopping (Dholakia and Uusitalo, 2002), online and store buying motivations (Dittmar et al., 2004), perceived risk of buying online (Garbarino and Strahilevitz, 2004) and internet shopping behaviour (Chang and Samuel, 2004).

These studies focused mainly on adults, less studies involved adolescents as the target population. Moreover, Jackson et al. (2001) noted that, though young women and men use the internet equally often, they use it differently, and this may influence the motivations of buying online. This stream of research may be a fertile area in marketing.

METHODOLOGY

Questionnaire

The scales, based on the literature, were used to assess adolescents' utilitarian and hedonic value toward the internet. The questionnaire comprised 30 items that were scored on a 6-point Likert scale ("strongly agree," "agree," "somewhat agree," "somewhat disagree," "disagree," and "strongly disagree"). The questionnaire could be divided into two major parts. One part was to explore adolescents' utilitarian value of the internet that included 5 subscales. The other part included 5 categories that assessed their hedonic value toward the internet.

The first five subscales were according to Wolfinbarger and Gilly (2001); Pui et al. (2007) that divided utilitarian value into five categories, such as convenience, choice, availability of information, lack of sociality, and cost saving (3 items for each subscale). The reliability coefficients for these five subscales were 0.808, 0.904, 0.803, 0.810 and 0.821.

The second part of the questionnaire comprised 15 items based upon a hedonic shopping motivation scale developed by Arnold and Reynolds (2003), Pui et al. (2007). The scale included five subscales; they are adventure, sociality, fashion, value and authority (3 items for each subscale). The reliability coefficients for these five subscales were 0.731, 0.820, 0.831, 0.834 and 0.736, respectively.

The questionnaire responses indicated utilitarian and hedonic attitude toward the internet consumption. A "strongly agree"

Table 1. Characteristics of the sample.

Characteristics	n	%
Gender		
Male	325	50.86
Female	314	49.14
Age (in years)		
16	191	29.9
17	216	33.8
18	232	36.3

Note: N = 639.

Table 2. Utilitarian value of the Internet shopping by gender.

Utilitarian value	Male	Female	t
	M (SD)	M (SD)	
Convenience	4.3636(0.6841)	4.1749(0.5568)	1.015***
Choice	4.0287(0.7341)	3.9352(0.5737)	1.336
Availability of information	3.9805(0.6040)	4.3947(0.4800)	-1.218**
Lack of sociality	4.2103(0.7711)	3.2399(0.5781)	2.757***
Cost saving	4.2805(0.7720)	3.7346(0.5927)	1.724*

Note: N = 639; * $p < .05$, ** $p < .01$, *** $p < .001$.

response equaled to a score of 6 and a "strongly disagree" response equaled to a score of 1. The average score of the items in a subscale to calculate the adolescent's views was adopted and the gender differences on the utilitarian and hedonic attitudes that were discussed are as follows:

Sample

Table 1 show that respondents of this study are adolescents (16 - 18 years old) in Taiwan who have internet shopping experience. To avoid a bias in the sample, this study adopted two sources of sample to lower the bias of the sample. One method is street distribution; 300 questionnaires in the downtown of Taipei City were distributed and out of which, 196 were valid for use. The other way is convenient sampling and 10 senior high schools were drawn randomly from Taipei City, Taiwan. Then, 1000 questionnaires were sent to chosen schools and 443 effective questionnaires were obtained. Finally, the subjects in the study were 639 high school adolescents, 325 are males and 314 are females.

Pretest

Pretest was adopted before conducting formal survey, confirming that the questionnaire had no semantic problem. Three Ph.D. candidates majoring in marketing served as the subjects of the pretests, and according to their suggestions, there is slightly revised wording of the items. In addition, pilot test were executed by distributing 30 questionnaires to some adolescents having online shopping experience. After that, much time is devoted to examining Cronbach's alpha of all constructs and items, and some items that fall below Cronbach's alpha of 0.7 were eliminated. Finally, the thirty items remaining in the questionnaire were used for later

analysis.

RESULTS

Gender difference in utilitarian value

Table 2 shows the mean scores of utilitarian values for online shopping. To investigate the gender differences in the utilitarian value for internet shopping, a series of t - tests on the mean scores was adopted. The t -scores ranged from -1.218 for availability of information to 2.757 for lack of sociality.

By analyzing the data, it pointed out that male and female adolescent' scores showed statistical differences. As shown in Table 3, males' scores were significantly higher than those of females on the subscales of convenience, lack of sociality and cost saving. In contrast, females' scores were significantly higher than those of males on the subscale of availability of information. Nevertheless, on the subscale of choice, the scores of both males and females displayed no statistical difference.

The result indicates that, male adolescents tend to highlight the values (for example, convenience, lack of sociality and cost saving) when going shopping online. This finding may be consistent with previous studies (Swaminathan et al., 1999; Alreck and Settle, 2002), suggesting that male adolescents are comparatively

Table 3. Hedonic value of the internet shopping by gender.

Hedonic value	Male	Female	t
	M(SD)	M(SD)	
Adventure	3.4359(0.6338)	4.0032(0.4988)	-1.047**
Sociality	3.2185(0.6240)	3.9032(0.4815)	1.321***
Fashion	3.3315(0.6362)	4.2138(0.4922)	-1.469***
Value	3.2397(0.6629)	3.8915(0.4862)	2.878**
Authority	3.1358(0.7550)	3.2439(0.5930)	1.962

Note: N = 639; *p<.05, **p<.01, ***p<.001.

more motivated by functional factors than female peers. On the availability of information subscale, female adolescents attained higher scores than the male adolescents. Previous studies indicated that, female adolescents felt more anxiety and negative attitudes when using the internet (Kadijevicb, 2000; Tsai et al., 2001). This study revealed that, female adolescents tend to collect more information as possible as they can before conducting internet shopping than male counterparts. Tsai et al. (2001) noted that, with more internet experience, adolescents would hold positive attitudes and less anxiety toward the internet, and the study can explain this phenomenon. On the choice subscale, this study did not show a significant difference, suggesting that both males and females hold the same attitude toward greater choice via internet shopping.

In addition, the major utilitarian values for girls were to go online for availability of information, convenience and choice. On the other hand, convenience was the main value for boys to go online, followed by cost saving and lack of sociality.

Gender difference in hedonic value

Mean scores of hedonic values for online shopping were shown in Table 3. This study adopted a series of t -tests on the mean scores to examine the gender differences in the hedonic value for internet shopping. The t scores ranged from -1.469 (fashion) - 2.878 (value). By analyzing the data, it indicated that, male and female adolescents' scores showed a statistical difference. As shown in Table 3, females' scores were significantly higher than those of males on the subscales of adventure, sociality, fashion and value. However, on the subscale of authority, the scores of both males and females displayed no statistical difference.

These findings are consistent with previous studies (Dittmar et al., 2004; Chyan and Chia, 2006; Bergadaa et al., 1995; Campbell, 2000; Dittmar and Drury, 2000) revealing that, internet shopping seems to play a psychologically and emotionally encompassing role for female adolescents than for male peers, whereas, male adolescents focus on the outcome to get the actual

goods with the minimum effort. In other words, when shopping online females are not only engaged more in buying involvement but are comparatively more motivated by emotional factors (for example, adventure, sociality, fashion and value). On the subscale of authority, this study did not find a significant difference, indicating that, the benefit of authority via online shopping is equally important for both males and females.

Furthermore, the major hedonic values for girls were to go online for fashion, adventure and sociality. On the other hand, adventure was the main value for boys to go online, followed by fashion and value.

DISCUSSION

The study explored gender differences among 639 Taiwanese adolescents' utilitarian and hedonic values concerning the internet. With regard to utilitarian values, the findings of this study are consistent with previous research that males are more functional in their buying motivations, suggesting that, valuing functional benefits of internet buying acts as a facilitator for male adolescents' online buying. As compared to female adolescents, male adolescents tend to be more motivated by functional factors (for example, convenience, lack of sociality and cost saving).

As hedonic values of the internet, the findings of this study were congruent with those of Arnold and Reynolds (2003) that indicated that younger females stress hedonic values more than younger males and have stronger hedonic shopping motivations. Arnold and Reynolds (2003) noted that females are more hedonic-oriented than males when they go to retail stores for shopping.

This study explored shopping values and reached the same conclusions via the channel of internet instead of retail stores, suggesting that female adolescents are more motivated by emotional factors (for example, adventure, sociality, fashion and value), as compared to male adolescents.

Nowadays, with the development of technology, both genders seem to have equivalent resources and equal access to the internet. However, the results supported the view that the gender differences in internet shopping

really exist in this generation. For male adolescents, the first three rankings of the relative importance of utilitarian values for adolescents to go online were convenience, cost saving and lack of sociality, and regarding hedonic values adventure was the main value for boys to go online, followed by fashion and value. On the contrary, the first three rankings of the relative importance of hedonic values for female adolescents to go online were fashion, adventure and sociality, and the primary utilitarian values for girls to go for web-based purchasing were availability of information, convenience and choice.

These findings would indicate that, there are some differences between the shopping motivations of males and females. The results suggest that factors such as convenience, cost saving and lack of sociality are the main reasons affecting male adolescents for internet shopping, and the primary factors affecting female adolescents for web-based shopping are fashion, adventure and sociality. The results were congruent with our hypotheses that there are gender differences in convenience, lack of sociality, cost saving, adventure, sociality, fashion, value and availability of information. Internet may well serve as the major shopping tool among adolescents and it is imperative to discover the factors that do help females' and males' participation in web-based buying.

These results suggest that, online marketers may work on producing some topics related to hedonic factors when targeting female adolescents, and stressing the functional benefits when targeting male adolescents. These findings enable internet marketers to conduct effective demographic segmentation.

Limitation and future direction of the study

There are some limitations in this study. First, due to the specific target (16 - 18 year-old adolescent), the study assumed that their purchasing abilities are basically near and did not take other demographic variables (for example, income) into consideration. Future studies could be extended in other demographic group. More-over, the sample was drawn solely from the Taiwanese population. The research should be further tested using samples from other countries such as America, China, Japan and so on. Despite the limitations, this study does furnish a fertile direction for internet marketing.

The findings of this study can provide some directions for future research. First of all, one important area for future research is to explore gender differences concerning utilitarian and hedonic values of web-based shopping by culture. Suh and Kwon (2002) reported that, consumers from different cultures have different attitudes, preferences and values, thus, consumers with different cultural background may have different attitudes toward computer-mediated consumption. It is interesting to see how the results of this study would vary in different cultural settings. Second, future researchers could investigate the differences of shopping values based on

different consumer market segments (for example, age, education, income). Future research should access consumers in other contexts.

Finally, the differences of shopping values between physical distribution channels and virtual web-based shopping need to be further investigated. What is more? Could shopping values serve as independent variables to examine the relationship with other variables?

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APPENDIX

Measurement scales

(Respondents were requested to answer the following questions from strongly agree to strongly disagree on a 6-point Likert scale.)

Convenience (Wolfenbarger and Gilly, 2001; Pui et al., 2007)

- 1-1. I can buy things whenever I want.
- 1-2. I can buy things at home.
- 1-3. Online shopping is convenient for me.

Choice (Wolfenbarger and Gilly, 2001; Pui et al., 2007)

- 2-1. I can access wide selection online.
- 2-2. I can access many brands online.
- 2-3. I can access many products online.

Availability of information (Wolfenbarger and Gilly, 2001; Pui et al., 2007)

- 3-1. I can get information easily online.
- 3-2. Internet provides a lot of information.
- 3-3. Information via internet is the newest.

Lack of society (Wolfenbarger and Gilly, ui et al., 2007)

- 4-1. I can avoid embarrassment when I buy things online.
- 4-2. Online makes me free from salesman.
- 4-3. Online makes me free from social interaction.

Cost saving (Wolfenbarger and Gilly, 2001; Pui et al., 2007)

- 5-1. Online shopping can save money.
- 5-2. I can compare price easily via internet.
- 5-3. I spend less on the internet.

Adventure (Arnold and Reynolds, 2003; Pui et al., 2007)

- 6-1. Online shopping is an adventure.
- 6-2. I find shopping stimulating.
- 6-3. Online shopping makes me feel like I am in my own universe.

Sociality (Arnold and Reynolds, 2003; Pui et al., 2007)

- 7-1. I can exchange information with friends online.
- 7-2. I can develop friendships with other internet shoppers.
- 7-3. I can extend personal relationship online.

Fashion (Arnold and Reynolds, 2003; Pui et al., 2007)

- 8-1. I can keep up with the trends.
- 8-2. I can keep up with new fashion.
- 8-3. I can expose myself to new products.

Value (Arnold and Reynolds, 2003; Pui et al., 2007)

- 9-1. I enjoy looking for discounts online.
- 9-2. I enjoy hunting for bargains online.
- 9-3. For the most part, I go online shopping when there are sales.

Authority (Arnold and Reynolds, 2003; Pui et al., 2007)

- 10-1. When shopping online I feel in control.
- 10-2. I have control over my online shopping process.
- 10-3. Internet enables me to control my own online shopping trip.