

Students' Online Shopping Behavior: An Empirical Study

¹ Narges Delafrooz, ² Laily Hj. Paim and ³ Ali Khatibi

1; 2. Faculty of Resource Management and Consumer Studies, University Putra Malaysia, 43400 Serdang, Selangor, Malaysia

3. Faculty of Management, Management and Science University, Shah Alam, Selangor, Malaysia.
nargesdelafrooz@gmail.com, Laily@putra.upm.edu.my, enquiry@msu.edu.my

ABSTRACT: The ever-increasing use of the internet in Malaysia provides a developing prospect for E-marketers. Such marketers' awareness of the factors affecting Malaysian buyers' attitude can further develop their marketing strategies in converting potential customers into active ones, while maintaining their existent online customers. This paper sets out to examine the factors influencing students' attitudes towards online shopping in Malaysia through a five-level Likert scale self-administered questionnaire, which was developed based on prior literature. A total of 370 students were randomly selected. The multiple regression analysis demonstrated the most significant determinants of consumers' attitudes towards online shopping. The results indicated that utilitarian orientation, convenience, price, and a wider selection influenced consumers' attitudes towards online shopping. Therefore, e-retailers should emphasize a more user-friendly function in order to provide utilitarian customers a way to find what they need efficiently. [Journal of American Science 2010;6(1):137-147]. (ISSN: 1545-1003).

Keywords: Attitude; online shopping; behavior, students

1. INTRODUCTION

Online shopping has been a growing phenomenon in all four corners of the world, in particular amongst countries possessing highly developed infrastructure available for marketing activities through the internet. Today, internet is not only a networking media, but also a global means of transaction for consumers. Internet usage has grown rapidly over the past years and it has become a common means for information transfer, services and trade. It has been reported that more than 627 million people in the world shopped online in 2006. (AcNielsen., 2007). Forrester (2006) anticipated that e-commerce market would grow from \$228 billion in 2007 to \$288 billion in 2009. Likewise in 2004, researchers were aware online retail sales in the US that were US\$65 billion in 2004 would rise to US\$117 billion in four years by 2008. Further, in 2005, it was anticipated that by 2010 e-commerce would account for US\$316 billion in sales; that is to say, 13 percent of overall retail sales; therefore, 61 percent of online users in the US would make purchases via internet in 2010, compared with just 46 percent in 2004 (Jupiter Research Survey, 2005).

University Students, a population 90 percent of which access the internet daily, spends \$200 billion a year in buying power to the US market, with the average student's available discretionary spending totaling \$287 monthly (Gardyn, 2002). Therefore, because of student's power in the marketplace, it is important for retailers and consumers behavior

educator to better understand this population's attitude toward online shopping. In the Malaysian context, with the expansion of educational services, university students have become common consumers of market segments (Sabri et al., 2008).

International Data Corporation (IDC) presents an outlook of internet and e-commerce industry in Malaysia, demonstrating the future market development from 2008 to 2012. The increase of unique internet users in Malaysia will create an awareness of e-commerce and make people interested in internet commerce. A mid-2005 survey by the Malaysian Communication and Multimedia Corporation (MCMC) indicated only 9.3 percent of internet users had purchased products or services through the internet during the preceding three months. Among those who did so, airline tickets were the most popular items (43.8%) followed by books (15.6%) and music (6.8%).

A large body of research is available on the online shopping in the world. However, there is still a need for closer examination on the online shopping buying behavior in specific countries. Considering that internet shopping is still at the early stage of development in Malaysia, little is known about consumers' attitudes towards adopting this new shopping channel and factors that influence their attitude (Haque, Sadeghzadeh, & Khatibi, 2006). The consumers' attitudes towards online shopping is known as the main factor that affects e-shopping

potential (Shwu-Ing, 2003). Attitudinal issues are also thought to play a significant role in e-commerce adoption; that is to say, through motivation and perception, attitudes are formed which, in turn, directly influence decision making (Haque et al., 2006). Therefore, understanding consumer attitude toward online shopping helps marketing managers to predict the online shopping rate and evaluate the future growth of online commerce. This paper first examines the relationship between consumer factors and attitude toward online shopping, and then analyzes the factors that influence attitude toward online shopping.

2. Factor affecting online shopping

Factors influencing peoples' online shopping attitude have been researched and documented in the context of traditional consumer literature. Consumers' characteristics such as personality nature, online shopping benefits and perceptions have also been found to influence consumers' online shopping behaviors and online shopping rate (Goldsmith & Flynn, 2004; Shwu-Ing, 2003). Therefore, understanding consumer attitudes helps marketing managers to predict the online shopping rate and evaluate the future growth of online commerce.

2.1 Personalities

Consumers have different personalities, which may influence their perception and how they perceive their online shopping behaviors that can be classified in two main orientations of utilitarian and hedonic (Wolfenbarger & Gilly, 2001).

Consumers who are utilitarian have goal-oriented shopping behaviors. Utilitarian shoppers shop online based on rational necessity which is related to a specific goal (Kim & Shim, 2002). They look for task-oriented, efficient, rational, deliberate online shopping rather than an entertaining experience (Wolfenbarger & Gilly, 2001). What they expect most from online shopping is to purchase in an efficient and timely way and to achieve their goals with the least amount of irritation (Monuwe, Dellaert, & de Ruyter, 2004). In terms of the effect of utilitarian orientations, Shim et al. (2001) posit that consumers who highly evaluate the utilitarian aspect of shopping will more likely use the internet for an information source. According to Ndubisi and Sinti (2006), utilitarian orientation of the website rather than hedonic orientation has a significant influence on Malaysian adoption. Since customers attach greater importance to the transaction related features of the website rather than the entertainment features. Furthermore, Moe (2003) argues that consumers' underlying objectives of visiting a website will play a significant role in their purchase attitude towards that website. Results from

her study also indicate a positive effect of a utilitarian orientation mode on purchase attitude.

Consumers who are hedonist have experiential shopping behavior. Hedonists not only gather information by shopping online but also seek fun, excitement, arousal, joy, festive, escapism, fantasy, adventure, etc. (Monuwe et al., 2004). These experiential shoppers want to be immersed in the experience rather than to achieve their goals by shopping online (Wolfenbarger and Gilly, 2001) and their perceived experiences also depend on the medium characteristics that induce enjoyable experiences (Sorce, Perotti, & Widrick, 2005). Hedonic (or experiential) shoppers are more attracted to well-designed online shopping sites that are easy-to-navigate and visually appealing. Generally, when hedonists are satisfied, the possibility of impulse purchases and frequency of visiting the website will increase (Wolfenbarger and Gilly 2001). Therefore, the design of a website to attract experiential shoppers merits special attention to insure the conversion of shoppers' product navigation into purchases. Childers et al. (2001) have confirmed that hedonic orientations for online shopping are important predictors of attitudes toward online shopping. Thus, for systems that are hedonic in nature, researchers can expect hedonic orientations to play a significant role in consumers' attitudes toward online shopping.

2.2 Online shopping perceived benefits

Perceived benefits are ramifications derived from attributes. The benefits can be physiological, psychological, sociological, or material in nature. Within the online shopping context, the consumers' perceived benefits are the sum of online shopping advantages or satisfactions that meet their demands (Shwu-Ing, 2003).

Most of the previous online shopping research has focused on identifying the attributes of online stores that promote success (Davis, 1989; Muylle, Moenaert, & Despontin, 2004). Findings by Forsythe et al. (2002) showed a positive and highly significant relationship between perceived benefits of Internet shopping and both frequency of shopping and amount spent online. Consumers' shopping benefits may similarly affect shopping behaviors in the virtual environment. Moreover, Shwu-Ing (2003) found consumers' benefits perception, comprising convenience, selections freedom, information abundance, homepage design and company name familiarity, had a significant relationship with attitude toward online shopping. Consumers usually compare the perceived benefits between shopping channels. The main motivation to shop online is that it is more convenient than to shop in-store; in other words, convenience is the most prominent factor that

motivates consumers to shop through the internet. Moreover, ease of search, good price/deal, good selection/availability, fun, impulse, customer service, and wider selection of retailers are additional reasons why people shop online (Khatibi, Haque, & Karim, 2006).

3. MATERIALS AND MODELS

In this study, the research model (Figure 1) that was adhered to examine the factors affecting online shopping contains constructs that have demonstrated literature support, and is based on a body of research done in this area in different countries, particularly online shopping on end-user perspective.

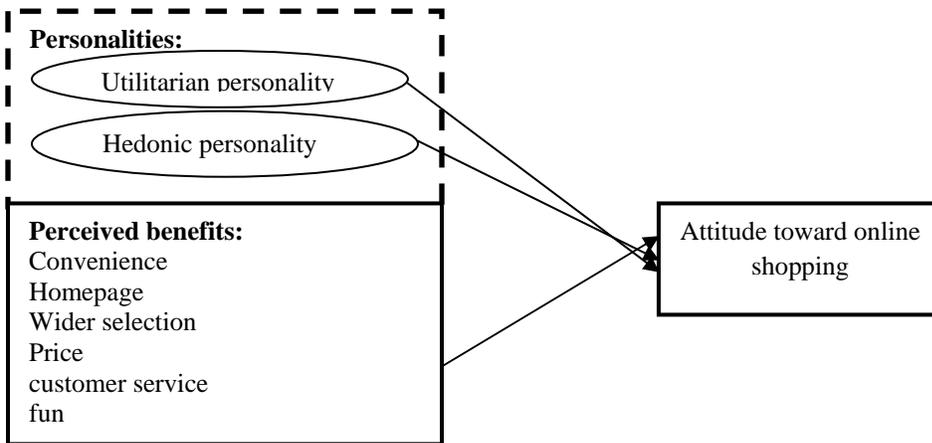


Figure1: Research Model

The schematic diagram of the research model above shows the relationship between the dependent and independent variables. Attitude toward online shopping is the dependent variable in this research. The dependent variable is analyzed in order to find out the answers or solution to the problem. Meanwhile, the independent variables in this research are online shopping orientations and consumers' perceived benefits. The independent variables are believed to be the variables that influence the dependent variable (attitude toward online shopping) in either a positive or a negative way.

A review of the related research shows that the theories of Reasoned Action (Fishbein & Ajzen, 1975) and Technology Acceptance Model (TAM) (Davis, 1989) are among the most popular theories used to explain online shopping behavior. Therefore, the theoretical framework of this study is based on these theories. The classic Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1980), and Technology Acceptance Model (TAM) have been extensively adopted for explaining and predicting user behavior in an online shopping environment.

The TAM posits that actual system use is determined by users' behavioral intention to use, which is, in turn, influenced by their attitude toward usage. Attitude is directly affected by users' belief about a system, which consists of perceived usefulness

and ease of use (Davis 1986). This belief-affect-intention-behavior causality has proven valid in the online shopping environment. The TAM was developed to predict and to explain consumer acceptance of online shopping by extending the belief-attitude-intention-behavior relationship in the TAM and TRA. In construction/development of the TAM, perceived usefulness and perceived ease of use reflect the utilitarian aspects of online shopping, while perceived enjoyment reflects the hedonic aspects of online shopping. Past research shows that perceived usefulness and perceived ease of use reflect utilitarian aspects of online shopping, whereas perceived enjoyment reflects hedonic aspects of online shopping (Monsuwe et al., 2004). Therefore, in the TAM, both utilitarian and hedonic aspects can be considered and both utilitarian and hedonic aspects of consumer experience influence consumer attitude toward using a new technology or system.

The TRA and the TAM claim that beliefs such as online shopping perceived benefits are completely mediated by attitude. The TRA asserts that beliefs such as perceived benefits are completely mediated by attitude. Verhoef and Langerak (2001) who employed the TRA in a study found that outcome beliefs had a significant influence on the attitude toward online shopping. The perceived benefits of online shopping in relation to traditional store shopping are one of the

driving forces in the adoption. The empirical findings support the premise that beliefs in online shopping

attributes are positively related to attitudes to online shopping.

Hypotheses: The following hypotheses were developed from the proposed research model:

Hypothesis 1: There is a significant relationship between utilitarian personality and attitude toward online shopping

Hypothesis 2: There is a significant relationship between hedonic personality and attitude toward online shopping

Hypothesis 3: There is a significant relationship between perceived benefits and attitude toward online shopping.

Hypothesis 3a: There is a significant relationship between convenience and attitude.

Hypothesis 3b: There is a significant relationship between homepage and attitude.

Hypothesis 3c: There is a significant relationship between wider selection and attitude.

Hypothesis 3d: There is a significant relationship between price and attitude.

Hypothesis 3e: There is a significant relationship between customer service and attitude.

Hypothesis 3f: There is a significant relationship between fun and attitude.

3.1 Sample and data collection

Data for the study were gathered by primary data collection method through consumer survey questionnaires administered among postgraduate students from a public university in Malaysia. A self-administered questionnaire was distributed to 500 students in the selected institutes. All the selected respondents were enrolled in their respective faculties or institutes doing a broad range of courses. Among 500 questionnaires that were distributed, approximately 405 were returned, but only 370 fully answered questionnaires from the respondents were analyzed.

Frequency distribution profile of respondents showed that 64.3 percent of the respondents were female while 35.7 percent of the remaining respondents were male. The majority of the respondents (43.8 %) fall in the age range between 20 to 25 years of age. Respondents having a monthly income ranging from RM 1000 to 2000 were the majority income group (37.3 %). From the ethnic point of view, Malays comprised 44% followed by Chinese and Indians that composed 40% and 13% of the study sample respectively (Table 1).

Table 1: Demographic characteristics of respondents

Variables and category	frequency	Percentage
Gender		
Male	132	35.7
Female	238	64.3
Age(Years)		
20-25years	162	43.8
25-30	108	29.2
30-35	61	16.5
35-40	35	9.5
More than 40years	4	1.1
Level of education		
Master	290	78.4
Ph.D	72	19.5
Post-doctoral	8	2.2
Monthly Income		
Under RM1000	73	19.7
RM 1001-2000	138	37.3
RM 2001-3000	36	9.7
RM 3001-4000	82	22.2
Over RM 4000	41	11.1
Ethnicity		
Malay	165	44.6
Chinese	150	40.5
Indian	49	13.2
Others	6	1.6

3.2 Data Collection Instrument

The data for the study were gathered through a structured questionnaire. All variables were operationalized using the literature on online shopping (Babin, Darden, & Griffin, 1994; Bruner & Hensel, 1996; Forsythe et al., 2002; Huang & Liaw, 2005; Hui, Tan, & Goh, 2006; Kim & Shim, 2002; Mathieson, 1991; Turban & Gehrke, 2000; Vijayasathy, 2002).

The first part of the questionnaire included questions concerning internet usage habits of the respondents such as where they accessed the internet, how often they browsed the internet, how much time they spent, what purposes they used the internet for and which kind of products they purchased online. The second part consisted of questions measuring all the variables including two questions which were meant to measure the frequency of their online shopping. All the questions utilized a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

3.3 Measures

Validity, the degree to which the instrument measures what it claims to be measuring. More specifically, content validity is demonstrated by assessing if the instrument is a representative sample of the content it was originally designed to measure which is often addressed in the development stage. The researcher sought to account for the content

validity of the instrument by basing its items on the related literature and exploiting the experience of other researchers and experts. Moreover, in order to improve the face validity of the survey, the instrument was reviewed for two times by an expert panel consisted of 4 members of professionals in the area.

On the other hand, to ensure convergence validity of the variables, factor analysis (principal component) was used to determine the underlying constructs that explain significant portions of the variance in the instrument items. The factor loadings, i.e. the correlation coefficients between the items and factors, were examined in order to impute a label to the different factors. The factor loadings for all items exceeded the minimum value of 0.4 considered for this study. Table 2 shows the number of items comprising each factor loading value.

Cronbach's alpha coefficient is the most frequently used estimate of internal consistency reliability. Cronbach Alpha scores for online shopping orientation, online shopping perceived benefits and attitude toward online shopping were computed to assess inter-item reliability for each of the multi-item variables. Cronbach's alpha coefficient was high in all scales, ranging from 0.83 to 0.90. These alpha scores exceed the .80 recommended acceptable inter-items reliability limit, indicating that the factors within each multi-item variable are, in fact, inter-related.

Table 2: Rotated Factor Matrix (a)

Measures and factors	1	2	3	4	5	6	7	8
Utilitarian1	.866							
Utilitarian2	.780							
Utilitarian3	.761							
Utilitarian4	.628							
Utilitarian5	.602							
Hedonic1		.909						
Hedonic2		.844						
Hedonic3		.771						
Hedonic4		.747						
Hedonic5		.665						
Hedonic6		.591						
Hedonic7		.589						
Convenience1			.851					
Convenience2			.832					
Convenience3			.777					
Convenience 4			.734					
Convenience5			.711					
Convenience6			.687					
Convenience7			.620					
Wider Selection1				.859				

Wider Selection2	.766		
Price1	.886		
Price2	.692		
Customer Service1		.827	
Customer Service2		.809	
Customer Service3		.799	
Customer Service4		.649	
Customer Service5		.618	
Homepage1			.790
Homepage2			.556
Homepage3			.436
Fun1			.693
Fun2			.679
Fun3			.602
Fun4			.569
Fun5			.536

Extraction Method: Principal Axis Factoring. Rotation Method: Varimax with Kaiser, Normalization

3.4 Data analysis techniques

Frequency distribution of the respondents was carried out according to questions related to internet usage and product purchase behavior. To test the hypotheses of this study, multiple regressions were conducted. The analysis enabled us to examine the individual relationship between the independent variables and attitude toward online shopping. This study employs user attitude toward online shopping as dependent variables and utilitarian personality, hedonic personality and consumers' perceived benefits as independent variables.

4. RESULT

4.1 Internet usage

More than half of the respondents (61.1 %) accessed the internet from their homes or apartments. Therefore, the mode for the most frequent source of access to the internet among respondents was home. Regarding the length of time the users spent per week on surfing the internet, 43.8 percent of respondents used it for more than 20 hours. While only a minority of respondents (5.7%) spent less than 5 hours per week on the internet. In conclusion, the results show a general pattern of internet usage of young consumers in Malaysia whereby it could be concluded that because they have their own internet connection at home leads them to be active internet users who spend an average of more than 20 hours a week web surfing. In addition, majority of respondents had wireless access to the internet. With regard to users' computer experience, as presented in Table 3, 38.6 percent of respondents indicated having used the computer between seven and ten years while participants who reported have used computers for more than 10 years represented more than 45% of the sample.

Table 3: General usage of Internet

	frequency	Percentage
Primary access location		
Home/Dorm/Apartment	226	61.1
Workplace	85	23.0
Public facilities	59	15.9
Mode of access		
Dial-up	88	23.8
High speed(DSL/Cable/T1)	127	34.3
Wireless	155	41.9
Internet Surfing (H/W)		

less than 5 hours/week	21	5.7
5-10 hours/week	23	6.2
11-15 hours/week	68	18.4
16-20 hours/week	96	25.9
more than 20 hours/week	162	43.8
Computer experience		
less than 1 years	-	-
1-3 years	11	3.0
4-6 years	83	22.4
7-10 years	107	28.9
more than 10 years	169	45.7
Internet experience		
Less than 1 years	6	1.6
1-3 years	31	8.4
4-6 years	108	29.2
7-10 years	143	38.6
More than 10 years	82	22.2

4.2 Product purchase behavior

Regarding product purchasing, the current study results revealed the type of online purchases made by Malaysian students (Table 4). In ranking order, respondents indicated they would mostly like to shop online for “computer/electronics/software” (36.9%), “book/DVD/CD” (31.18%), “clothing/accessory/shoes” (18.26%) and “food/beverage” (5.35%), while the smallest proportion of purchases included “toys” (4.24 %). Therefore, the current study results revealed that the types of products purchased online by Malaysian students were similar to products purchased online by global internet shoppers.

Table 4: Product purchase behavior

	frequency	Percentage
Online buying:		
Food/beverage	29	5.35
Clothing/Accessory/Shoes	99	18.26
Toys	23	4.24
Computer/Electronics/Software	200	36.9
Book/DVD/CD	169	31.18
Others	22	4.05

4.3 Hypotheses testing

Ho1: There is no significant relationship between utilitarian personality and attitude.

The multiple regression result indicates a regression coefficient of $\beta = .115$ and a significant value of $p = .000$ which is smaller than α at .05 level of significance which means that the null hypothesis is rejected. It can thus be concluded the association between utilitarian personality and attitude toward online shopping was positively significant.

Ho2: There is no significant relationship between hedonic personality and attitude.

A regression coefficient of $\beta = .037$ and a significant value of $p = .076$ for utilitarian personality which is larger than α at .05 level of significance

which means that we fail to reject the second null hypothesis. It can thus be concluded there was no relationship between hedonic personality and online shopping.

Ho3a: There is no significant relationship between the convenience and the attitude.

According to the results of the multiple regression analysis, convenience indicated a regression coefficient of $\beta = .437$ and a significant value of $p = .000 < .05$, which means that the null hypothesis was rejected. Therefore, it can be concluded that there was a significant and positive association between convenience and attitude toward online shopping at .05 level of significance.

Ho3b: There is no significant relationship between the homepage and the attitude.

According to the results of multiple regression, utilitarian personality indicated a regression coefficient of $\beta = .019$ and a significant value of $p = .212 > .05$, which means that we fail to reject the null hypothesis. Therefore, it can be concluded that there was a positive but insignificant association between homepage and attitude toward online shopping at .05 level of significance.

Ho3c: There is no significant relationship between the price and the attitude.

The results of multiple regression indicated a regression coefficient of $\beta = .206$ for price and a significant value of $p = .000 < .05$. It can be interpreted that the null hypothesis mentioned above is rejected. Therefore, it is concluded that there was a positive and significant association between price and attitude toward online shopping at .05 level of significance.

Ho3d: There is no significant relationship between the wider selection and the attitude.

The results of multiple regression indicated a regression coefficient of $\beta = .243$ for wider selection and a significant value of $p = .000 < .05$ which can thus be interpreted that the aforementioned

null hypothesis is rejected. Therefore, it was concluded that there was a positive and significant association between wider selection and attitude toward online shopping at .05 level of significance.

Ho3e: There is no significant relationship between the customer service and the attitude.

The results of multiple regression indicated a regression coefficient of $\beta = .085$ for customer service and a significant value of $p = .060 > .05$ which can thus be interpreted that we fail to reject the aforementioned null hypothesis. Therefore, it was concluded that there is no significant association between customer service and attitude toward online shopping at .05 level of significance.

Ho3f: There is no significant relationship between the fun and the attitude.

The results of data analysis indicated a regression coefficient of $\beta = .063$ for fun and a significant value of $p = .095 > .05$ which can thus be interpreted that we fail to reject the aforementioned null hypothesis. Therefore, it is concluded that there was no significant association between fun and attitude toward online shopping at .05 level of significance.

Table 5: Estimates of coefficients for the model

Attitude dimension(Y)	B (Unstandardized Coefficients)	Std. Error	Beta (Standardized Coefficients)	t	p-value
Constant	-5.513	0.750		-7.349	0.000
Convenience	0.800	0.050	0.437	16.121	0.000
Price	0.961	0.097	0.206	9.948	0.000
Wider selection	1.154	0.115	0.243	9.768	0.000
Utilitarian	0.273	0.053	0.115	5.196	0.000
homepage	-0.057	0.046	-0.019	-1.251	0.212
Hedonic	-0.050	0.028	-0.037	-1.780	0.076
Customer service	0.234	.044	0.085	2.274	0.060
Fun	0.125	.045	0.063	2.799	0.095

Notes: $R = 0.672$; $R^2 = 0.664$; Adj. $R^2 = 0.661$

5. DISCUSSION AND CONCLUSION

The analytical results of our investigation indicate relationships between consumers' perception of the factors that influence their attitude toward online shopping. The findings suggested that

utilitarian orientations, convenience, price and wider selection are important determinants of users' attitude toward online shopping. Moreover, they have a significantly positive impact on users' attitude toward online shopping. A practical assessment of

these dimensions revealed that individuals, who purchase online, perceived significantly greater benefit in terms of convenience, price and a wider selection.

The analytical results are generally consistent with the findings of previous studies. Consumers' personal tendency was shown to affect their attitude toward online shopping. The findings showed that utilitarian orientations had higher affect on attitude while hedonic orientations had no significant effect with attitude toward online shopping. This may be due to the low level of involvement of the young consumers who have experience in online shopping (only 4.2 % buy through online regularly) (Shah Alam, Bakar, Ismail, & Ahsan, 2008). Therefore, findings from this study are consistent with previous studies by Moe (2003), Shim et al. (2001), and Li et al. (2002). As a result, users are goal-orientated and have previously been planning their most recent online purchase. Utilitarian shoppers may be inclined to shop through internet in order to increase shopping productivity. On the other hand, consumers' tendency when doing online shopping would be more likely to be utilitarian than hedonic (Ndubisi & Sinti, 2006). Therefore, e-retailers, who focus on utilitarian customers, should emphasize a more user-friendly function in order to provide utilitarian customers a way to find what they need efficiently.

In addition, a further aspect of the study included online shopping perceived benefits. The findings of the study imply that students are looking for more convenience (time and money saving), cheaper prices and wider selection when they shop online, making them as the dominant factors that motivate consumers to shop online. On the other hand, there were not significant relationship between users' attitude toward online shopping and homepage, customer service, and fun.. This may be due to the low level of involvement of the young consumers who have experience in online shopping (only 4.2 % buy through online regularly) (Shah Alam et al., 2008).

According to previous researches, it is suggested that convenience has a positive impact on attitude toward online shopping (Kim & Kim, 2004). A practical assessment of these dimensions revealed that individuals who purchase online, perceive value convenience and price as the most significant advantages of online shopping. Therefore, online retailers need to ensure that the online shopping process through their websites is made as simple and inexpensive as possible for consumers to shop online.

What is more, the findings of the study imply that a wider selection is a dominant factor in that it

motivates students to shop online, a finding that is in line with previous research conducted by Haque et al, (2006) who found that good selection and a wider availability of product choices, offered by online retailers, motivate consumers to purchase goods and services over the internet. In other words, the online shopping motivation scales capture a wide variety of reasons why people go shopping online or choose not to purchase online. Therefore, online retailers need to offer good selection and wider choice of products for shoppers.

The findings of the study imply that a price is a dominant factor in that it motivates users to shop online. The result is consistent with the findings of Ghani et al. (2001) that has identified price positively influencing online purchase behavior. In addition, a lower price is the main reason online shoppers tend to purchase through internet because of competitive pressure, especially from new online retailers using price as a main competitive weapon to attract customers (Haque et al, 2006). Therefore, online retailers need to provide competitive price for products in order to attract online shoppers to their websites and encourage them to make a purchase decision. However, this will lead to intense price competition which is expected to increase even further with the availability of intelligent search engines and comparing shopping agents that enable online consumers to easily compare product offerings from various online retailers. Thus, in order to avoid intense price competition, online retailers need to find other ways to differentiate themselves from their competitors.

Finally, the findings suggest that online retailers need to provide more convenience and competitive price and more variety of products in order to attract more people encouraging them to make a purchase decision. However, this will lead to competition among retailers and the level of competition is expected to increase even further with the availability of intelligent search engines and the ascending number of shopping agents that enable consumers to easily obtain product information and compare product offerings from various online retailers. It is necessary to recognize the limitations of the current study. Then, it is proposed for future research to apply this instrument to variant consumer groups, be them university or non-university members. Moreover, Future investigation could also examine the causal relationships between factors and consumers' overall attitude toward online shopping employing a Structural Equation Modeling technique. In addition, Future research should use a more elaborate model in cooperating additional antecedent factors beyond those mentioned in this study.

ACKNOWLEDGMENT

The authors are grateful to Prof. Dr Samsinar M. Sidin and Dr Sharifah Azizah Haron for their assistance with my thesis work.

Correspondence to:

Laily Hj Paim

Faculty of Resource Management and Consumer Studies, University Putra Malaysia, 43400 Serdang, Selangor, Malaysia

Telephone: 00603-8946 7051

Emails: Laily@putra.upm.edu.my;
nargesdelafrooz@gmail.com; enquiry@msu.edu.my

REFERENCES

[1] ACNielsen. (2007). Seek and You Shall Buy. Entertainment and Travel. viewed 18 January 2007 <<http://www2.acnielsen.com/news/20051019.shtml>>.

[2] Ajzen, I., & Fishbein, M. (1980). Understanding Attitude and Predicting Social Behavior. *New Jersey: Prentice-Hall*.

[3] Babin, B. J., Darden, W. R., & Griffin, M. (1994). Work and/or fun: measuring hedonic and utilitarian shopping value. *Journal of Consumer Research*, 20, 644-456.

[4] Bruner, G. C., & Hensel, P. J. (1996). Marketing Scales Handbook: a Compilation of Multi-Item Measures. *American Marketing Association, Chicago, IL 2*.

[5] Childers, T. L., Cristopher L. Carr, Joan Peck, & Carson, S. (2001). Hedonic and Utilitarian Motivations for Online Retail Shopping Behavior. *Journal of Retailing*, 77(4), 511-535.

[6] Davis, F. D. (1989). Perceived Usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13, 319-340.

[7] Fishbein, M., & Ajzen, I. (1975). Belief, Attitude, Intention and Behavior: An Introduction to theory and Research. *Reading, Massachusetts: Addison-Wesley*.

[8] Forrester. (2006). 'Online Retail: Strong, Broad Growth', viewed 18 January 2007. <<http://www.forrester.com/Research/Document/Excerpt/0,7211,39915,00.html>>.

[9] Forsythe, S., Petee, T., & Kim, J. O. (2002). Modeling Consumer Behavior in On-line

Environments: Scale Development: National Textile Center. . *Annual Report*.

[10] Gardyn, R. (2002). Educated consumers. *American Demographics*, 24(10), 18-19.

[11] Ghani, E. K., Said, J., & Nasir, N. (2001). *Cross Sectional Studies on on-line Shopping Among Malaysian Employees*. Unpublished Dissertation, University Technology MARA.

[12] Goldsmith, R. E., & Flynn, L. R. (2004). Psychological and behavioural drivers of online clothing purchase. *Journal of Fashion Marketing and Management*, 8(1), 84-95.

[13] Haque, A., Sadeghzadeh, J., & Khatibi, A. (2006). Identifying Potentiality Online Sales In Malaysia: A Study On Customer Relationships Online Shopping. *Journal of Applied Business Research*, 22(4), 119-130.

[14] Huang, H.M., & Liaw, S. S. (2005). Exploring users' attitude and intention toward the web as a survey tool. *Computer in Human Behavior*, 21, 729-743.

[15] Hui, K. L., Tan, B. C. Y., & Goh, C. Y. (2006). Online information disclosure: motivators and measurements. *ACM Transactions on Internet Technology*, 6(4), 415-441.

[16] Khatibi, A., Haque, A., & Karim, K. (2006). E-Commerce: A study on Internet Shopping in Malaysia. *Journal of Applied Science* 3(6), 696-705.

[17] Kim, E. Y., & Kim, Y. K. (2004). Predicting online purchases intentions for clothing products. *European journal of Marketing*, 38, 883-897.

[18] Kim, Y. M., & Shim, K. Y. (2002). The influence of Internet shopping mall characteristics and user traits on purchase intent. *Irish Marketing Review*, 15(2), 25-34.

[19] Li, H., Daugherty, T., & Biocca, F. (2002). Impact of 3-D advertising on product knowledge, brand attitude and purchase intention: the mediating role of presence. *Journal of Advertising Research*, 31(3), 43-57.

[20] Mathieson, K. (1991). Predicting user intentions: comparing the technology acceptance model with the theory of planned behavior. *Information Systems Research*, 2, 173-191.

[21] Moe, W. (2003). Buying, Searching, or Browsing: Differentiating between Online Shoppers Using In-

Store Navigational Clickstream. *Journal of Consumer Psychology*, 13.

[22] Monsuwe, T. P., Dellaert, B. G. C., & de Ruyter, K. R. (2004). What drives consumers to shop online? A literature review. *International Journal of Services Industry Management*, 15(1), 102-121.

[23] Muylle, S., Moenaert, P., & Despontin, M. (2004). The conceptualization and empirical validation of web site user satisfaction. *Information & Management*, 41 543-560.

[24] Ndubisi, N. O., & Sinti, Q. (2006). Consumer attitudes, system's characteristics and internet banking adoption in Malaysia. *Management Research News*, 29(1/2), 16-27.

[25] Sabri, M. F., MacDonald, M., Masud, J., Paim, L., Hira, T. K., & Othman, M. A. (2008). Financial Behavior and Problems among College Students in Malaysia: Research and Education Implication. *Consumer Interests Annual*, 54.

[26] Shah Alam, S., Bakar, Z., Ismail, H. B., & Ahsan, M. N. (2008). Young consumers online shopping: an empirical study. *Journal of Internet business*(5), 81-98.

[27] Shim, S., Eastlick., M. A., Lotza, S. I., & Warrington, P. (2001). An online pre-purchase intentions model: The role of intention to search. *Journal of Retailing*, 77, 397-416.

[28] Shwu-Ing, W. (2003). The relationship between consumer characteristics and attitude toward online shopping. *Management Intelligence & Planning*, 21(1), 37-44.

[29] Sorce, P., Perotti, V., & Widrick, S. (2005). Attitude and age differences in online buying. *International Journal of Retail & Distribution Management*, 33(2), 122-132.

[30] Turban, E., & Gehrke, D. (2000). Determinants of e-commerce website. *Human Management*, 19, 111-120.

[31] Verhoef, P. C., & Langerak, F. (2001). Possible determinants of consumers' adoption of electronic grocery shopping in The Netherlands. *Journal of Retailing and Consumer Services*, 8, 275-285.

[32] Vijayasathy, L. R. (2002). Product characteristics and Internet shopping intention. *Internet Research: Electronic Networking, Applications and Policy*, 12(5), 411-426.

[33] Wolfinbarger, M., & Gilly, M. C. (2001). Shopping Online for Freedom, Control, and Fun. *California Management Review*, 43(2), 34-55.

07/09/2009