

## Gender Differences in Perceptions and Attitudes Toward Online Shopping: A Study of Malaysian Consumers

Yet Mee Lim<sup>1</sup>, Boon Liat Cheng<sup>2</sup>, Tat Huei Cham<sup>3</sup>, Caryn Kar Yan Ng<sup>4</sup> and Jue Xin Tan<sup>5</sup>

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### ABSTRACT

Despite the high potential of online shopping in Malaysian market, there is still a lack of understanding with regards to gender differences on online shopping behaviour. This research was conducted to determine the differences between male and female Internet users on their perceptions and attitudes toward online shopping. Data were collected from 500 respondents via social network website, Facebook. The results of the study revealed that men are more in favour of online shopping, have positive attitude towards web advertising, and perceive online shopping as more useful compared to women. On the other hand, women users perceive online shopping to be joyful than men. This research results have profound implications on online retailers and marketers.

*Keywords: E-commerce; Online Shopping; e-Retailing; Consumer Behaviour; Information System*

### INTRODUCTION

Internet usage is popular nowadays and it has become an integral part of life throughout the world. In Malaysia, the number of Internet users has grown tremendously over the years due to the growth in mobile broadband segment, improved network quality, and the availability of competitive and innovative data plans offered by the service providers (Malaysian Communications and Multimedia Commission, 2018). There are many innovative applications on the Internet which turn out to be important to users. One of these innovative applications is online shopping. According to Bellman, Lohse, and Johnson (1999), online shopping is defined as the act of buying or not buying via the Internet media. The acceptance of new technology, increased number of online users, and increasing trend of online shopping are some key drivers in the development of e-commerce in Malaysia. According to statista.com (2019), the revenue for e-commerce in Malaysia is recorded at the amount up to US\$ 3.751 million. It is expected that the figures will continue to soar to US\$ 5.776 million by 2023. Although online shopping has been part of the success of Malaysian e-commerce landscape and is a prominent contributor to Malaysia's gross domestic product, the focus on the gender differences in online shopping still require further investigation. For example, studies examining perceptual and attitudinal differences among genders in e-commerce are much needed in order to understand the needs of the customers in the industry.

<sup>1</sup>Department of Building and Property Management, Universiti Tunku Abdul Rahman, Malaysia.

<sup>2</sup>Department of Marketing, Sunway University Business School, Malaysia.

<sup>3</sup>Department of International Business, Universiti Tunku Abdul Rahman, Malaysia. [chamth@utar.edu.my](mailto:chamth@utar.edu.my)

<sup>4</sup>Division of Corporate Communication and Public Relations, Universiti Tunku Abdul Rahman, Malaysia.

<sup>5</sup>The International College, Tunghai University, Taiwan.

The finding from the literature found that male and female respond differently to external stimuli and possess different thinking and perceptual patterns (Kim, Lehto, & Morrison, 2007). These differences have influenced the process and outcome of their Internet usage (Ang, 2017; Pascual-Miguel, Agudo-Peregrina, & Chaparro-Peláez, 2015). Male and female users surf the Internet for different purposes (Jackson, Ervin, Gardner, & Schmitt, 2001; Richard, Chebat, Yang, & Putrevu, 2010). Male users surf the Internet for functional purposes such as tools for information searching, downloading, and purchasing activities; whereas female users use it for interpersonal communication such as social network posting, online studying, messaging and so forth (Colley & Maltby, 2008; Jackson et al, 2001). Moreover, male users are more interested in online shopping whereby they spend more time and money on online purchases than female users (Jadhav & Khanna, 2016; Shaouf, Lü, & Li, 2016). Male Internet users are less motivated by social interaction and more convenience-oriented while female users are just the opposite (Chen, Yan, Fan, & Gordon, 2015; Hui & Wan, 2007). Female consumers find traditional shopping as a good way to shop which enables them to be engaged in social activity (Dittmar, Long, & Meek, 2004). Male users are more satisfied with online shopping as it is quick and efficient. Female users indeed, are less favourable towards online shopping (Dittmar et al., 2004).

The above review indicates that male and female Internet users may be different in several aspects in online shopping—perceptions, attitudes, and behaviours. It is anticipated that this study will help us gain a better understanding of online shoppers through the criteria of attitude towards online shopping, attitude towards web advertising, perceived ease of use, perceived usefulness, perceived innovativeness, perceived enjoyment, perceived online risks, and subjective norm. All these factors are commonly examined in the studies of Internet applications and online shopping (e.g. Cha, 2011; Hsu & Bayarsaikhan, 2012; Lim & Cham, 2015).

## **LITERATURE REVIEW AND RESEARCH HYPOTHESES**

### **Attitude towards Online Shopping**

Attitude towards buying on the Internet is defined as a consumer's positive or negative feeling about performing the purchasing behaviors on the Internet (Schlosser, 2003). Attitude is a multi-dimensional construct with cognitive, affective, and behavioral components (Fishbein & Ajzen, 1975). The cognitive component refers to what a person knows about an object whereas the affective component concerns with the extent to which an individual likes or dislikes the object. Lastly, the behavioral component pertains to the behavioral intention, covert or overt actions towards the object. According to Hasan (2010), male Internet users have been found to be rated higher than female users in all of these three attitudinal components. Female users' cognitive attitude towards online shopping is the lowest and behavioral intention to shop online is relatively high but still lower than male users.

Generally, male users are more experienced and have more positive attitude toward computers than female users (Lin, Featherman, Brooks, & Hajli, 2016). Male users may view online shopping positively and tend to engage in such activities. Wu (2003) did provide some evidence that male users have a more favorable attitude towards online shopping as compared

to female users. Female users prefer and enjoy physical evaluation of products, i.e., seeing and feeling a product before they buy it (Dittmar et al., 2004). This evidence is further supported by Citrin, Stem, Spangenberg, and Clark (2003) whereby it was found that women demonstrate a stronger need for tactile input in product evaluation than men. The inability to touch or try out products may cause female consumers to have a less favorable attitude towards online shopping. Based on the above review, the first hypothesis was developed as follows:

**H1:** *Male Internet users have a more favorable attitude towards online shopping than female Internet users.*

### **Attitude towards Web Advertising**

Advertising is one of the components of e-commerce strategy (Goldsmith & Lafferty, 2002) and e-marketers use it to create brand awareness, preference, and selection (Boudreau & Watson, 2006). Firms spent a considerable amount of money on Internet advertising to inform and persuade consumers about their products and services (Boudreau & Watson, 2006; Kireyev, Pauwels, & Gupta, 2016; Manchanda, Dubé, Goh, & Chintagunta, 2006). It has been suggested that male and female users have different preference and attitude towards web ads (Shaouf et al., 2016). Generally male users exhibit a more positive attitude towards web advertising as they are more likely to purchase from the web than female users (Hernández-Méndez & Muñoz-Leiva, 2015; Shaouf et al., 2016). Male users tend to prefer web ads because of their interactivity and pictorial features (Ray, Sormunen, & Harris, 1999). However, female users are more likely to purchase an item directly through an address or phone number in a traditional media advertisement (Shavitt, Lowrey, & Haefner, 1998). Hence, it was hypothesized that:

**H2:** *Male Internet users have a more favorable attitude towards online advertising than female Internet users.*

### **Perceived Ease of Use**

Perceived ease of use refers to the degree to which a person believes that using a particular system would be free of effort and how easy it is to learn to use the system (Davis, 1989). Some consumers believe that a particular application is useful for their online shopping purpose but they might have problems in using the system. Past researches have generally indicated that perceived ease of use can influence computer usage directly (Cham, Low, Lim, Aye, & Ling, 2018; Davis, 1989). Therefore, the extent to which Internet users buy online would be influenced by its perceived ease of use.

The ease of use of a system would increase the likelihood of adoption and usage. Male users are found to use the web more as they possess significantly stronger skills in higher-level computer topics such as operating systems, graphics, database, webpage creation and programming (Kay, 2006). Thus, it can be further explained that male users have stronger Internet technology skills than female users to perform online shopping tasks. The computer environment is regarded as 'masculine', which may lead women to feel some sense of disempowerment (Woodfield, 2000). Female users show less computer self-efficacy and experience higher computer anxiety (Hsiao & Tang, 2015; Jackson et al., 2001; Kay, 2006). Perceived ease of use is more salient in female users, compared to male users due to a lower computer aptitude among females (Venkatesh & Morris, 2000). Female users are reported to

show less ability than male users and are likely to see computers as an end in themselves (Ray et al., 1999). Teo (2001) found that female users take more time to be familiar with new Internet applications. It seems that using computer for online shopping is more difficult for female users. This discussion leads to the following hypothesis:

**H3:** *Male Internet users perceive a greater ease of use in online shopping than female Internet users.*

### **Perceived Usefulness**

Perceived usefulness is defined as the degree to which a person believes that using a particular system would enhance his or her online shopping performance (Davis, 1989). According to Teo (2001), perceived usefulness is more important than perceived ease of use or perceived enjoyment in Internet usage. Perceived usefulness has a positive effect on behavioral intention to use (Cham et al., 2018; Venkatesh & Morris, 2000). Al-Maghrabi and Dennis (2009) concluded that male users are more influenced by usefulness of technology as compared to female users in online shopping. Venkatesh and Morris (2000) indicated that male users perceive a greater usefulness than female users in utilising a new technology/application. Male users, who tend to have higher computer self-efficacy, perceive it is more useful to use online applications (Hsiao & Tang, 2015; Ong & Lai, 2006). Thus, it was stipulated that:

**H4:** *Male Internet users perceive a greater usefulness in shopping online than female Internet users.*

### **Personal Innovativeness**

Personal innovativeness in the context of information technology is defined as the “willingness of an individual to try out any new information technology” (Agarwal & Prasad, 1988). The Internet is an innovation which requires the users to learn certain skills in order to use the technology (Sinha & Kim, 2012). Therefore, innovativeness can be regarded as an antecedent of consumers’ cognitive attitude for information technology absorption and application (Agarwal & Karahanna, 2000). Internet innovativeness is an important subject to understand online shopping as it has been associated with online purchase attitudes and intention (Bigne-Alcaniz, Ruiz-Mafe, Aldas-Manzano, & Sanz-Blas, 2008; Citrin, Sprott, Silverman, & Stem, 2000; Sinha & Kim, 2012). Various studies have argued that customers’ innovativeness varies according to gender (Lian & Yen, 2014; Rahim & Rosly, 2014; Sinha & Kim, 2012; Strohmeyer, Tonoyan, & Jennings, 2017). Sinha and Kim (2012) found that innovativeness is more significant for male customers compared to the female counterparts in India. In their recent study, Lian and Yen (2014) also found that male consumers tend to have a higher personal innovativeness than female consumers in online shopping. Based on the discussion above, it can be postulated that:

**H5:** *Male Internet users exhibit a higher level of personal innovativeness than female users.*

### **Perceived Enjoyment**

Emotions come with the use of technology. The experience and feeling of joy, elation, pleasure, depression, disgust, displeasure, and hate by an individual is associated with a particular act (Traindis, 1971). Browsing the Internet is generally perceived to be an

enjoyable activity (Teo, 2001), and “using a specific system is perceived to be enjoyable in its own right, aside from any performance consequences resulting from system use” (Davis, Bagozzi, & Warshaw, 1992). Individuals who experience pleasure and joy in using computer are likely to use them more than the others, and there is a linkage between enjoyment and the intention to use it for online shopping (Chen, Hsu, & Lu, 2018; Natarajan, Balasubramanian, & Kasilingam, 2017). It has been found that male Internet users perceive more enjoyment when purchase online compare to female counterpart (Hwang, 2010; Lissitsa & Kol, 2016). Male online shoppers usually find online setting is more interactive as compared to the pure text or brick and mortar environment (Wen, Prybutok, & Xu, 2011). Therefore, it was hypothesized that:

**H6:** *Male Internet users perceive more enjoyment in shopping online than female Internet users.*

### **Perceived Online Risks**

Lack of trust is one of the most frequently cited reasons for consumers for not making purchases from Internet vendors (Grabner-Kräuter & Kaluscha, 2003). Dittmar et al. (2004) found that security issue is the main barrier to online purchase especially for female shoppers. Female users are more concerned about their personal privacy and hence spending lesser time in online buying (Cao, Lu, Gupta, & Yang, 2015; Sheehan, 1999). They feel insecure and eventually withdraw from using the Internet for shopping as they are more concerned with the negative outcomes associated with online transactions, e.g. loss of privacy and financial loss. Furthermore, it was found that male users perceive a higher trustworthiness in online shopping than the female users (Cao et al., 2015; Chiu, Lin, & Tang, 2005). Based on the above review, the following hypothesis was formulated:

**H7:** *Male Internet users perceive a lower risk associated with online shopping than female Internet users.*

### **Subjective Norm**

Subjective norm is defined as the degree to which an individual believes that people who are important to him/her think that he/she should perform the behavior in question (Fishbein & Ajzen, 1975). In marketing, social influence through word of mouth has a significant impact on consumers purchase decision (Cham, Ng, Lim, & Cheng, 2018; Martin & Jacob, 2010). In the technology domain, influences from both peer and superior are strong determinants of subjective norm (Taylor & Todd, 1995). Studies indicated that female users are more strongly influenced by subjective norm (Venkatesh & Morris, 2000). This shows that they are strongly influenced by external information upon engaging with online shopping. As such, female users will be more likely to increase their willingness to purchase online if they receive a site recommendation from a friend (Garbarino & Strahilevitz, 2004). Based on above review, the hypothesis is summarized as follows:

**H8:** *Male Internet users are less likely to be influenced by subjective norm than female Internet users.*

## RESEARCH METHOD

A structured questionnaire was used to collect the necessary data. The questionnaire was divided into two main parts: Section A and Section B. Section A collects respondents' demographic information such as gender, age, marital status, education, and income level. Section B includes the items measuring the eight variables regarding to the respondents' perceptions and attitudes towards online shopping. The items used to measure all of the variables in study were adapted from the existing scales found in the literature. Items used to measure attitude towards online shopping and advertising were adapted from Hasan (2010) and Wolin and Korgaonkar (2003) respectively. The measurement scales of perceived ease of use, perceived usefulness, and perceived innovativeness were adopted from Bigne-Alcaniz et al. (2008). Items measuring perceived enjoyment were adapted from Teo (2001), perceived online risks were adopted from Yang and Jun (2002), and subjective norm were adapted from Lin (2007). Refer to the Appendix 1 for these scale items.

In addition, a five-point Likert scale was used ranging from 1 = "Strongly Disagree" to 5 = "Strongly Agree". A pilot test was conducted before distributing the actual questionnaires to the targeted respondents. The target respondents consisted of Internet users who had or had not made any online purchases before. Of the 500 questionnaires distributed to the Internet users via Facebook social network, 485 completed questionnaires were returned with a response rate of 97 percent. The sample size of 485 in this study fulfils the minimum requirement of sample needed for T-Test analysis (Hair, Black, Babin, Anderson, & Tatham, 2010). Moreover, questionnaires were distributed evenly to both male and female groups to provide a justifiable response for comparison purpose.

## RESEARCH RESULTS

Data collected for this study were statistically analysed using SPSS. Table 1 presents the demographic characteristics of the respondents. The sample was about equally distributed between males (49%) and females (51%). Majority of the respondents were of Malay in ethnicity (49%), married (52%), in the age group of between 21 and 30 years (44%), and earned between RM 3000 – RM 4999 (42%). As for the education level, most of the respondents have bachelor degree. Additionally, all the respondents have at least one year of experience in using the Internet.

Table 2 presents the results of the hypothesis testing. The results show that H1 was supported by the data ( $p = 0.000$ ). This means that male Internet users (Mean = 3.721, S.D. = 0.627) have a more favourable attitude towards online shopping than the female users (Mean = 2.868, S.D = 0.929). This result is consistent with the prior studies (e.g. Citrin et al., 2003; Dittmar et al., 2004; Hansen & Jensen, 2009; Lin et al., 2016; Wu, 2003) whereby the mean score of attitude towards online shopping for male users was significantly higher than that of female users. In addition, H2 was also supported by the data ( $p = 0.038$ ). It was found that male internet users (Mean = 3.425, S.D. = 0.865) were found to be more in favour of web advertising as compared to the female users (Mean = 2.564, S.D = 0.932). This finding is also consistent with that of the prior studies whereby it was found that men believe web advertising to be more enjoyable, useful, and informative than traditional media advertising

(Hernández-Méndez & Muñoz-Leiva, 2015; Shavitt et al., 1998; Shaouf et al., 2016; Wolin & Korgaonkar, 2003).

**Table 1:** Sample Characteristics (N = 485)

Variables	Classifications	Percentage (%)
Gender	Male	49
	Female	51
Age	< 20	10
	21-30	44
	31-40	25
	41-50	11
	51-60	7
	> 61	3
Race	Malay	41
	Chinese	35
	Indian	10
	Others	14
Marital Status	Single	48
	Married	52
Monthly Gross Income	Less than RM 2000	3
	RM 2001 – RM 3000	17
	RM 3000 – RM 4999	42
	RM 5000 – RM 6999	28
	More than RM 7000	10
Education Level	Primary / Secondary	7
	Diploma /Professional certificates	29
	Bachelor Degree	43
	Postgraduate Degree	21
Years of Using the Internet	1-5 years	10.5
	6-10 years	62
	11-15 years	23
	More than 15 years	4.5

The next hypothesis found to be significant is H4 ( $p = 0.000$ ). The result indicates that male users (Mean = 3.425, S.D = 0.865) perceived online shopping to be more useful than female users (Mean = 2.472, S.D = 0.899). Similar finding has been reported in the past literature whereby men perceive that this method of purchasing is useful because of the aid from the information technology (Al-Maghrabi & Dennis, 2009; Hsiao & Tang, 2015; Ong & Lai, 2006; Venkatesh & Morris, 2000). Evidently, male users perceived online shopping to be useful compare to the female counterpart. Contrary to the hypothesised difference in perceived enjoyment (H6), the results in the present study revealed that female users seem to enjoy more in shopping online than male counterparts—a lower degree of perceived enjoyment was found in the male group (Mean = 3.198, S.D = 0.912) than the female group (Mean = 3.572, S.D = 1.612). This result was found to be inconsistent with that of the prior studies by Hwang (2010), Lissitsa and Kol (2016), Wen et al. (2011), and Zhang and Prybutok (2003). As for the context perceived risks, it was found in Table 2 that there is a significant difference between the male and female internet users towards the risk perception

in online shopping. Specifically, it was found that male Internet users perceive a lower risk associated with online shopping than the female counterpart. Thus, the H7 developed for this study is supported and this evidence is consistent with the past studies (e.g. Cao et al., 2015; Chiu et al., 2005; Dittmar et al., 2004;). However, this study did not find any significant gender differences in perceived ease of use (H3), perceived innovativeness (H5), and subjective norm (H8).

**Table 1:** T-Test Results of Perceptions and Attitudes toward Online Shopping between Male and Female Internet Users

	Male		Female		p-value
	Mean	SD	Mean	SD	
<b>H1: Attitude towards Online Shopping</b>	3.721	0.627	2.868	0.929	0.000**
<b>H2: Attitude towards Web Advertising</b>	3.425	0.865	2.564	0.932	0.038*
<b>H3: Perceived Ease of Use</b>	3.104	1.0299	3.741	0.781	0.182
<b>H4: Perceived Usefulness</b>	3.502	0.734	2.472	0.899	0.000**
<b>H5: Perceived Innovativeness</b>	2.643	1.057	3.281	1.075	0.651
<b>H6: Perceived Enjoyment</b>	3.198	0.912	3.572	1.612	0.000**
<b>H7: Perceived Online Risks</b>	2.594	0.939	3.602	0.738	0.021*
<b>H8: Subjective Norm</b>	2.361	0.616	3.265	0.965	0.788

Notes: \*\*  $p < .001$ , \*  $p < .05$ .

## DISCUSSION AND CONCLUSION

The objective of this study is to investigate the gender differences in attitudes and perceptions toward online shopping. The findings are summarized as follows:

- 1) There are gender differences in Internet users' attitude towards online shopping, attitude towards web advertising, perceived usefulness of online shopping, and perceived enjoyment of online shopping.
- 2) Specifically, male Internet users have a more favourable attitude towards online shopping and web advertising, perceive online shopping to be less risky, and perceive online shopping to be more useful than female Internet users.
- 3) However, female Internet users seem to enjoy more in online shopping than male counterparts.

This study provides retailers in Malaysia with some valuable insights in relation to online business. Online business owners can have a better understanding of their customers in relation to their attitudes and perceptions toward online shopping. It has been found that male Internet users have a more favourable attitude towards online shopping and web advertising. The evidence shows that there is a need for online retailers to allocate considerable resources to improve their online stores and ads to attract female shoppers in particular. Website quality and marketing initiatives could be effective in cultivating positive attitudes among the



Internet users. State-of-the-art website designs, reliable web connections, and catchy ad information content might promote favourable impression among them. It should be emphasised that gender differences should be taken into consideration before designing the websites. Specifically, the design of the websites should suite the taste of customers in relation to gender. That is, consider feminine aspect in website design if the target market for the particular product is female Internet users, and vice-versa.

It has been found that male Internet users perceive online shopping to be more useful than female users. This implies that online retailers should take actions to improve the perceived usefulness of online shopping among the female shoppers. Customer services provided by the online retailers play an important role in making online shopping to be more useful to female users. Additional online services and personal customer service should be provided to facilitate female users in navigating the web site. It is recommended that the online retailers use a real-time communication technology to handle queries from the customers. In addition, providing customers with the order tracking technology can allow customers track their order from time to time, which reduces the feeling of worry and anxiety among the customers, especially among females.

This study found that female users perceive online shopping to be more enjoyable than the males. Although this result contradicts to the hypothesis and findings from the prior studies (e.g. Al-Maghrabi & Dennis, 2009; Ong & Lai, 2006; Venkatesh & Morris, 2000), it is consistent with that of James's (2013) study. As stated by the author, women tend to look for enjoyment and entertainment while shopping. Women may find it more fun to shop online with the advantages inherent to online shopping. Browsing at own leisure, shopping without concerning own appearance, pick and select with endless choices, group shopping with exchange ideas and comparison before selection, unlimited shopping time, less hassle, less tiring, and fast delivered purchases are possible reasons why female, especially among younger group (about half of the respondents in this study were female and less than 30 years old), perceived online shopping to be more enjoyable. James (2013) further iterated that men do not like to associate shopping with enjoyment; instead they think of it as a purposeful activity. In other words, men do shopping with an objective in mind—they shop to get what they want. Online marketers may include interactive features and 3D effects in browsing for products to appeal to the male group, while continue capturing the younger female group with the fun elements in online shopping.

Although this study has provided some meaningful contributions, there are few limitations associated with this research. First, the findings may lack of generalisability. The respondents in the present study were mainly users of social media sites. Hence, this study largely ignores the Internet users not being engaged in the social media. The findings from this study may not represent the perspectives of the older group of Internet users since the respondents in this study were relatively young in the 21 to 30 age group. It is suggested that further research should include a larger group of respondents across different age groups and races. It is also suggested that future studies should attempt to examine the impact of consumers' characteristics and cultural background on their perceptions and attitudes towards online shopping. This approach will provide a better understanding to both the practitioners and academic researchers with respect to online consumers. Lastly, comparison studies across countries may be conducted as they are especially useful for market segmentation purpose in this borderless online industry.

In conclusion, this research has presented the results on the differences between male and female consumers' perceptions and attitudes towards online shopping. It is anticipated that the results in the present study can shed light on the understanding of the differences between genders in online business. Online retailers should make certain improvements by tailoring their website features and services to meet the expectations and requirements of respective gender groups. Note that the profitability of business comes from the understanding of consumer perceptions and attitudes in relation to the factors involved in online shopping. The real issue here is to attract and retain Internet users to buy online by promoting a positive attitude and easiness of purchase via the Internet. Due to the rapid advancement of technology, today's marketing strategies would need to change substantially to satisfy consumers of different groups. By understanding all the findings in the present study, it is hoped that, the rate of online shoppers in Malaysia will be further accelerated thus spur the economy into the next chapter of development.

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