



**FACTORS INFLUENCING THE ONLINE SHOPPING BEHAVIOUR OF
STUDENTS IN UNIVERSITI TUNKU ABDUL RAHMAN (UTAR),
KAMPAR CAMPUS**

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DECLARATION

We hereby declare that:

- (1) This undergraduate research project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.
- (2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.
- (3) Equal contribution has been made by each group member in completing the research project.
- (4) The word count of this research report is 18710 words.

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APPROVAL FORM

The research report attached here to, entitled “Factors Influencing the Online Shopping Behaviour of Students in Universiti Tunku Abdul Rahman (UTAR), Kampar Campus” was presented and submitted by Chai Kar Yen, Lee Yong Wei, Peh Jing Ting, and Yap Hew Yeng in fractional fulfilment of the requirement for the Bachelor of Communication (Hons) Public Relations is hereby acknowledged and accepted.

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Ms.Aruna Raj a/p Devarajoo

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LIST OF ABBREVIATIONS

TRA	Theory of Reasoned Action
TPB	Theory of Planned Behaviour
PR	Perceived Risks
PB	Perceived Benefits
SN	Subjective Norms
PBC	Perceived Behavioural Control
IV	Independent Variable
DV	Dependent Variable
MV	Mediation Variable

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Abstract

Recently, National Consumer Complaints Centre (NCCC) found out that there are more and more online shopping users become the victims of unscrupulous online merchants in Malaysia. There were 7,692 complaints and amounting to a loss of RM4 million which were reported at NCCC's Annual Consumer Complaints Report 2015. However, online shopping is still an uptrend in Malaysia. According to Malaysia e-commerce insight, there were 15 million of Malaysian are actively on using online shopping and Generations Y are the most active online users. Therefore, this study examines the factors influencing the online shopping behaviour of students in Universiti Tunku Abdul Rahman (UTAR), Kampar campus. The targeted respondents of this research are foundation students and undergraduates in UTAR, Kampar. A conceptual framework is proposed by applying the constructs of Theory of Planned Behaviour (TPB) including attitudes, subjective norms, perceived behavioural control, intention and behaviour and two additional factors which are perceived risks and perceived benefits adopted from the past empirical studies. Purposive sampling which is categorized as one of the non-probability sampling has been selected as the sampling method for this study. The research method of this study is quantitative research and this study is a cross-sectional study as the data is obtained all at once. A pilot test will be carried out before the distribution of actual questionnaires to the respondents to ensure the reliability of the variables and improve the quality of the questionnaires. Total of 390 questionnaires will be distributed to the respondents. Descriptive analysis, Pearson Correlation Coefficient (PCC) and Multiple Linear Regression (MLR) are used to analyse the data collected.

Keywords: *e-commerce, online shopping, university students, online scams*

CHAPTER 1: INTRODUCTION

This chapter consists of the background of research, statement of problem, research questions, research objectives and significance of study.

1.0 Background of Research

In this era of globalization, internet has been growing rapidly all over the world. According to The Statistics Portal, there are over 3.5 billion of users accessed to the internet in year 2016. It indicated that there were 45 percent of the global populations were active in using internet (Internet usage worldwide-Statistics & Facts, n.d.). The development of internet has revolutionized the traditional business as well as the people's lives. People rely on the internet as it plays a significant role in their daily life. There are numerous people take internet as an essential tool in their daily life socially, economically and even emotionally. They can access to the internet via smartphones, laptop, computer and other devices (Ambad, Kalimin & Yusof, 2017). Their reliance on the internet is not only for working or study purposes, but also seeking for news or entertainment (Wilson, Leong & Hong, n.d.). Internet also becomes an important platform for the organizations to communicate and deliver their products and services to the consumers. The high accessibility of internet may increase the likelihood of consumers to purchase the goods and services through online (San, Omar & Thurasamy, 2015).

Online shopping is defined as the process of people buying services or products through the internet (Oxford, 2018). It is generally known as "E-commerce" that provides a platform for people to buy services or products from the marketers through internet (Muda, Mohd & Hassan, 2016). E-commerce is also known as "E-business" that consists of a very wide business area on internet. It involves different parties like distributors, suppliers and consumers to make a business deal through online. The whole process of E-commerce can be manually done by using internet, computer and information technology and communication in order to create an interaction between the consumers and retailers. E-commerce is crucial in expanding the trade relations to the worldwide through internet as it not only focuses on transaction, but it also consists of various financial activities and different business aspects of trade. E-commerce has a wide scope of stakeholders including vendors, sellers, buyers, customers, governments, traders and so on (Omar & Anas, 2014).

E-commerce leads online shopping to become a new trend among the people in the world. According to The Statistics Portal, there are over 1.61 billion of users purchasing merchandise

through online in the global context in 2016 (Online-Shopping and E-Commerce worldwide: Statistics & Facts, n.d.). In Malaysia, there are approximately 22 million which consists of 68 % of the populations are using internet actively (Malaysia Country Commercial Guide, 2017). Besides, high rates of E-commerce usage is found among the Malaysians. According to Export.gov, there are 15.3 million shoppers with the 50 % of the populations in Malaysia. It is found that most of the Malaysians online shoppers are motivated by the price advantages, availability of reviews and product range on the online stores. Furthermore, they are also attracted by the offers from online stores such as convenience, free shipping, and other exclusive deals to purchase more product on the online stores (Malaysia Country Commercial Guide, 2017). One of the online store examples is “Zalora”. It is a rising online shopping websites among the internet users that is offering transactions and purchasing through the internet (Murad & Salleh, 2014).

Online shopping is a platform for consumers to purchase goods and services by communicating directly with the sellers through the internet. Most of the consumers choose online shopping is because they can easily access to the internet and it is time saving. It is very convenient while informative as the users can save their time and obtain the product information like reviews of the particular products before any purchase (Muda, Mohd & Hassan, 2016). The younger generation is not only familiar with e-commerce, but they are also capable of getting information faster. Therefore, the online shoppers tend to be younger generation nowadays (Kim & Ammter, 2008).

Thus, this research identify the factors that influence the online shopping behaviour of students as students are the heavy internet users and active online shoppers as compare to other generations (Seock & Bailey, 2008).

1.1 Statement of Problem

Online shopping is a trend in Malaysia. The development of Internet technology enables the Malaysian consumers to purchase goods or services through online. The consumers usually search the information of the product and buy their preferable merchandise over the Internet (Kwek, Tan & Lau, 2010). However, online shopping is found to arise some issues such as online scams and high abandonment rates.

There are over 1.61 billion people worldwide purchasing products and services through online in 2016 (Online-Shopping and E-Commerce worldwide: Statistics & Facts, n.d.).

However, the revolution of technologies and internet has been a huge platforms and good opportunities for Fraudsters to commit old and new type of frauds (Smith, 2010). The diversity of online fraud is a major problem that is faced by many countries in recent years. There were millions of victims had committed in a wide diversity of scams no matter in full or part of online (Button, Nicholls, Kerr & Owen, 2014). The Australian Competition and Consumer Commission (ACCC) reported that there are more than 1000 online scams were received and its worth amounting more than \$150,000 in 2017 (Don't get scammed by a fake online store, 2017).

ACCC's Scamwatch service reported that online shoppers in the age range of 18 to 24 age was the largest group on the cases that losing money to online shopping scammers. The Deputy Chair of ACCC, Delia Rickard stated that online scammers noticed that Australians love online shopping and they take it as advantage to create a fake online shopping website that contains of professional-looking design and steal the logos that look exactly like genuine online stores (Don't get scammed by a fake online store, 2017) .

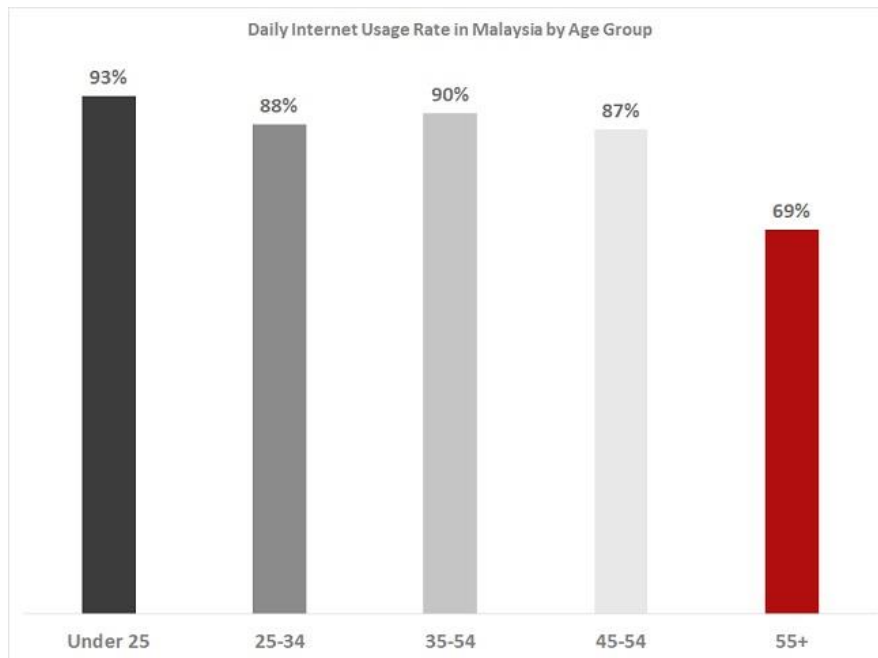
In Malaysia, National Consumer Complaints Centre (NCCC) found out that there are countless online shopping users become the victims of unscrupulous online merchants as they tend to purchase goods and services through internet nowadays (Pillay, 2017). According to technology news reported by NewStraitsTime, there were 7,641 complaints from NCCC regarding to e-commerce sector in 2014. Comparing to the total complaints in 2015, there were 7,692 complaints and a loss of RM4 million which had been reported at NCCC's Annual Consumer Complaints Report 2015. According to the CCC legal and policy executive Shabana Naser Ahmad, she stated that the online scamming is the majority complaints as compared to product and service delivery or quality (Pillay, 2017).

The online fraud involves the activity of buying products through online, internet banking transactions, phishing and scams which is stated by Science, Technology and Innovations Minister Datuk Seri Madius Tangau (Online cheating cases up last year, says minister, 2017). He also mentioned that the most cases reported in Malaysia during the last five years were online frauds. There were a total of 3,921 cases regarding to online frauds in 2016 as compared with 3,257 cases in 2015 according to CyberSecurity Malaysia (Malaysia Is Becoming a Global Hub for Online Scams, Will You Be The Next Victim?, 2015). The growth of online fraud cases has been escalating along with the development of Internet and related technologies (Xiao & Benbasat, 2011). In fact, everyone who involves in the activity through online will easily

fall prey to online frauds. Online shoppers and the people who are active on online forum may encounter a higher risk of online fraud victimisation (Wilsem, 2011). Therefore, it can be believed that there are many victims involving in the cases of online frauds among the Malaysians. However, the police reports have not be lodged (CyberSecurity, 2015).

Recently, there was an online shopping scam case happened in Malaysia. According to NewStraitsTime, there was a foreign student currently studying in Malaysia who had emailed to the National Consumer Complaints Centre (NCCC) regarding to the cases of online scam. He mentioned that he purchased a mobile phone from a retailer through the online website. He agreed the deal with one-third of the original price of the smartphone. However, he realised that the phone that he received was faulty when he returned to his home country after few months later. Then, he brought the phone to the authorised agent in order to repair it. However, they could not help him because the phone was fake. He was shocked and realized that he fell to the trap from the online scammers (Pillay, 2017).

Although there are a lot of cases regarding to online scams occurred, however, online shopping is still an uptrend in Malaysia (Vijandren, 2017). According to Malaysia e-commerce insight, there are 15 million of Malaysian are active in using online shopping. Out of millions of the online shopping users, Generations Y are the most active online users as compared to others. The graph chart below shows that the daily internet usage into age groups among Malaysian. Obviously, the age group under 25 contributed to the highest percentage of daily internet usage which is 93 % as compared to other age groups. Users who are aged between 25 to 34 also dominate about 88% in the daily usage of internet (Malaysia ECommerce Insights, n.d.). The age group of 20-29 has the highest percentage of daily internet usage as compares to other age groups (Pillay, 2017).



Appendix A

Source: Malaysia ECommerce Insights

According to credit card.com, it stated that online shopping has become the norm for many consumers. Online shopping will cause online users to debt if they do not shop wisely. Executive director at Consolidated Credit Counseling Services, Jeffrey Schwartz mentioned that consumer may easier spend impulsively without much though compared to paying with cash in an actual store (Workman, 2014). From the statement above, it indicates that online shopping may bring a lot of impacts to the students. However, Generation Y is still the most active online shopping users in the worldwide. Stated by New Straits Times (2017), United Overseas Bank Limited (UOB) Malaysia found that there is a growth of 38 percent in online spending in the first six months in 2016 .The Generation Y was the majority contributors who had spent for 1.4 times more than other generations (Vijaindren, 2017). Generation Y (broadly) is known as the people who were born from 1981 to 1999 (Bolton, Parasuraman, Hoefnagels, Migchels, Kabadayi, Gruber, Loureiro & Solnet, 2013). Generations Y is categorized as technologically-savvy as they were born form the digital age and they are more likely to use media for their daily basis (Muda, Mohdb & Hassan, 2016).

Thus, this research determines the factors that influence the online shopping behaviour of students in Universiti Tunku Abdul Rahman (UTAR), Perak campus due to Generation Y

has still made up the majority of the online shoppers although there are so many online scams reported around and impact them negatively.

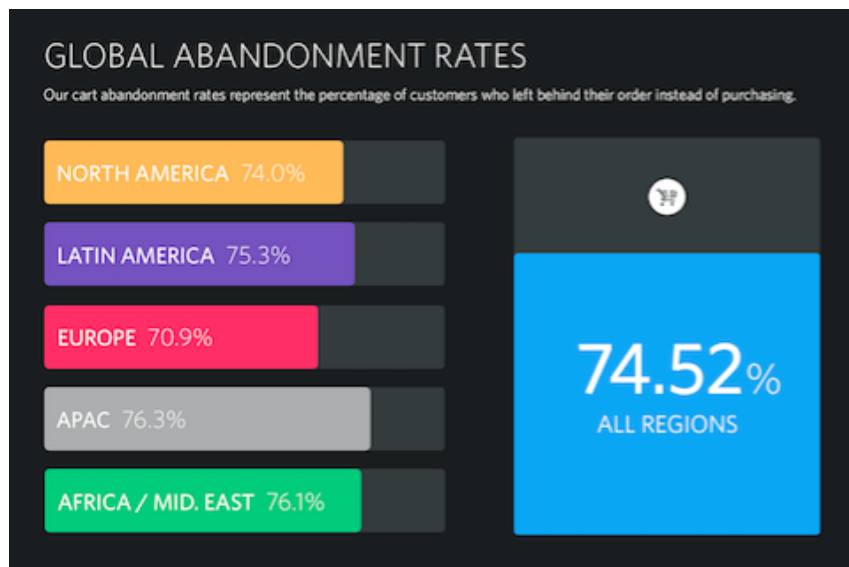
Furthermore, according to technology news reported by The Star Online, there were about 93% of consumers from South-East Asia (SEA) had regular frequencies to make online purchases, surveyed by PwC's Total Retail Survey in year 2016 (Mahalingam, 2016). According to The Statistic Portal, US\$1,076m was the revenue that reached by Malaysia in the "E-Commerce" market in year 2017 (ECommerce Highlights Malaysia, n.d.). The significant growth of the statistic given shows that online shopping is in an uptrend among the Malaysian. PwC senior executive director, Scott Constance mentioned that consumers in Malaysia generally research electronic products through online. However, they prefer to purchase electronic products at store instead of online (Mahalingam, 2016). It shows that Malaysian do not really purchase items or products through online although they have a high usage of online shopping. Based on the Malaysian Communications and Multimedia Commission (MCMC) Internet Users Survey 2016, although there are 10.3 per cent of the online shopping users engaged in browsing the online shopping platform, however, they did not make actual purchases (Pillay, 2017). This leads to the phenomenon of online shopping cart abandonment happened among the Malaysian. Shopping cart abandonment can be defined as the act of consumers placing the prefer items in their online cart but without making any actual purchase (Close & Kukar-Kinney, 2010).

From the past researcher studies, there were 88% of online shoppers who had abandoned their electronic carts in the past from the industry studies report (Close & Kukar-Kinney, 2010). It signifies that the problem of abandonment of online shopping cart has occurred since last 10 years. According to the data from Sale Cycle, it illustrates that abandonment rates have continued to increase in recent years globally.



Appendix B

Source: Sale Cycle



Appendix C

Source: Sale Cycle

According to the data from remarketing firm SaleCycle, it shows that the online shoppers in Asia Pacific (APAC) in which about 76.3 % of people have abandoned their online transaction among the measurement of cart abandonment and remarketing data from over 500 global retail, fashion brands and travel which is the highest rate. It can be proven that online shoppers in APAC are most likely to abandon the transaction as compared to others in the world. The chief revenue officer for APAC, SaleCycle, Chris Binkworth mentioned that online shoppers nowadays tend to abandon their transactions due to the overall customers experiences (Hicks, 2016).

In Malaysia, there were about 46.1 % of cart abandonments occurred at the payment stage which was stated by the Andrew Meola who signed as the new partnership recently in Kuala Lumpur, Malaysia in 2016. Besides, the significance of user experience is not acknowledged by most of the companies in Malaysia as mentioned by Eng Sheng Guan, the chief executive officer of MOLPay. This may lead to the retailers to the failure of securing more customers and closing as many deals as they should (Kumar, 2017). Thus, this research aims to understand the reasons of abandonment of online shopping cart occurred among the students (Kukar-Kinney & Close, 2009).

Human behaviour is complexity and difficult to be explained in details (Ajzen, 1991). Based on the problem statement, although there are a number of cases of online scam or fraud, yet there are still many people are willing to purchase products online. This may lead to the researchers to do in-depth insight into what factors have driven the online consumer's

behaviour. Besides, the increase of abandonment of online shopping cart cases are also driven by the behaviour of the customers (Hicks, 2016). Therefore, Theory of Planned Behaviour (TPB) is the most suitable theory to be used in this research because the constructs of the theory are very suitable in explaining and predicting an array of human behaviours (Martin, Usdan, Nelson, Umstattd, LaPlante, Perko, & Shaffer, 2010).

1.2 Research Questions

1. What is the relationship between attitudes and online shopping behaviour of students in UTAR, Perak campus?
2. What is the relationship between subjective norms and online shopping behaviour of students in UTAR, Perak campus?
3. What is the relationship between perceived behavioural control and online shopping behaviour of students in UTAR, Perak campus?
4. What is the relationship between perceived risks and attitudes of online shopping of students in UTAR, Perak campus?
5. What is the relationship between perceived benefits and attitudes of online shopping of students in UTAR, Perak campus?

1.3 Research Objectives

1. To determine whether attitudes influence the online shopping behaviour of students in UTAR, Perak campus.
2. To determine whether subjective norms influence the online shopping behaviour of students in UTAR, Perak campus.
3. To determine whether perceived behavioural control influences online shopping behaviour of students in UTAR, Perak campus.
4. To determine whether perceived risks influence the attitudes of online shopping of students in UTAR, Perak campus.
5. To determine whether perceived benefits influence the attitudes of online shopping of students in UTAR, Perak campus.

1.4 Significance of Study

Although there is a significant rise of online scams cases, however there are still many online shopper users especially the Generation Y including the university students tend to use online shopping channels rather than the traditional shopping channels in purchasing merchandise and services. Thus, it is crucial to know their online shopping behaviour in order to find out the why they are still willing to take risk to shop online even though online scam is a growing issue. Having an in depth understanding of the students' online shopping behaviour can aware them about online scams and prevent them to become the victims of the online scams. For example, if the student adopting the online shopping channel due to the perceived benefits of online shopping, it may easily lead them to become one of them victims of online scams as they might have ignored the perceived risks of online shopping (Seock & Bailey, 2008). Hence, understanding the factors that influence their online shopping behaviour can educate the students to become a wise online shoppers such as evaluating sources of the product information and its credibility before making purchases.

Besides, the research findings can benefit the online shopping retailers and marketers in improving and implementing their e-commerce marketing strategies and plans. This is because the findings of this research will offer an in depth understanding of online shoppers' behaviour by identifying the effects of various variables including perceived risks, perceived benefits, attitudes, subjective norms and perceived behavioural control. Thus, it helps the online shopping retailers to develop and execute an effective marketing plan. Eventually, it could be useful to overcome the high abandonment rates. This is due to if the online shopping retailers understand the actual factors that lead to high abandonment rates, they can solve the problems by using the correct approaches. It is important for marketer to understand students' online shopping behaviour because students are the most potential customers to make online purchase due to they would willing to spend hours daily online (Seock & Bailey, 2008). Stated by Razeni & Amin (2013), understanding customer behaviour allows the marketers to design effective marketing strategies. Hence, by developing a correct marketing plan may attract the university students to make actual purchase and decrease the high abandonment rates.

Lastly, this research can be served as a reference to other researchers for further studies regarding the relationship between the factors and online shopping behaviour of university students. It is because the findings can provide an in-depth insight about the factors that influence students' online shopping behaviour. The findings may also further confirm the results of the previous research if the findings are synchronized with the results of the past

empirical studies. More importantly, this study may enriches people's knowledge of university student's online shopping behaviour.

CHAPTER 2: LITERATURE REVIEW

This chapter includes the theoretical framework, definition of constructs, review of past studies, proposed conceptual framework, operational definition of variables and background of online shopping.

2.0 Theoretical Framework

Conceptual Model of Theory of Planned Behaviour (TPB)

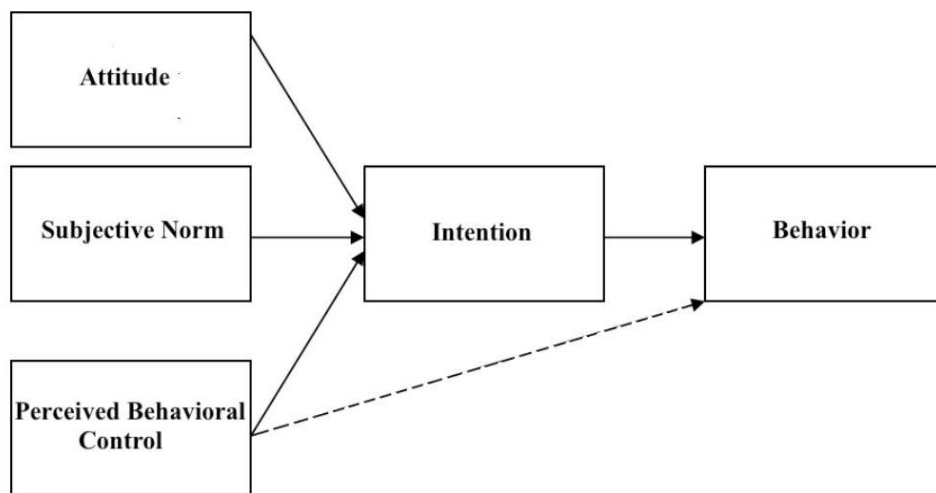


Figure 2.0

Source: Ajzen (1991)

Theory of Planned Behaviour (TPB):

Theory of Planned Behaviour (TPB) is known as the extension of the Theory of Reasoned Action (TRA) which was formulated by Icek Ajzen (Ajzen, 1991). This extension is due to the TRA has limitation in dealing with voluntary behaviour while TPB suggested that behaviour is not completely under control thus a voluntary action (Ajzen, 1991). TRA was extended into TPB by additionally including a new conceptual element which is Perceived Behavioural Control (PBC) (Javadi, Dolatabadi, Nourbakhsh, Poursaeedi & Asadollahi, 2012).

According to Ajzen (1991), there are three variables of intention and behaviour include attitude, subjective norms and perceived behavioural control (PBC). These prerequisites of

intention can predict one's intention to engage in a certain behaviour (Ajzen, 1991). In another words, intention is formed by the combination of the attitude, subjective norms and perceived behavioural control and eventually intention influences the person's behavioural change (Health Communication Capacity Collaborative, n.d.). Attitude towards behaviour and subjective norms are the factors that impact intention that play a central role to execute a given behaviour. In addition, perceived behavioural control will affect the intention and move toward the actual behaviour (Gotland, 2011).

TPB is a more applicable behavioural change model as Ajzen proposed that if an individual has actual control over the behaviour, he or she is assumed to engage in the certain given behaviour (Ajzen, 1991). Therefore, an individual will conduct the certain behaviour if he or she has a more positive attitude and subjective norm, higher perceived behavioural control and intention (Ajzen, 1991).

In TPB, there are three types of beliefs that have the tendency in guiding behaviour of human include behavioural beliefs, normative beliefs and control beliefs (Health Communication Capacity Collaborative, n.d.).

Behavioural beliefs, normative beliefs and control beliefs are the three underlying determinants of the three constructs to guide the human behaviour. Behavioural beliefs is a person's belief about the final result of a certain behaviour (Ajzen, 1991). Behavioural beliefs result in favourable or unfavourable attitude towards the behaviour (Health Communication Capacity Collaborative, n.d.). Normative belief is a certain behaviour of an individual that can be influenced by other factors (Ajzen, 1991). Normative beliefs will produce subjective norms (Health Communication Capacity Collaborative, n.d.). While control beliefs is a person's belief towards the presence of circumstances that will help or prevent a performance of behaviour (Ajzen, 2001). It creates a behavioural control by influencing the performance of the behaviour (Health Communication Capacity Collaborative, n.d.).

The constructs of TPB will be discussed further in review of past studies in this chapter.

2.1 Definition of Constructs of TPB:

2.1.1 Attitudes

Attitude is a psychological variable that shows a person's readiness whether to engage in a particular act (Jung, 1971). It is an emotional factor or personal factor that may affect an individual's positive or negative manner and hence influence their behaviour (Sultan & Uddin, 2011).

2.1.2 Subjective Norms (SN)

It refers to the consumers' perception are influenced by some significant factors such as media, peers, family and authority figures (Javadi et al, 2012).

2.1.3 Perceived Behavioural Control (PBC)

Perceived behavioural control is perceived as whether difficulty or easily for an individual to perform a particular behaviour (Sultan & Uddin, 2011).

2.1.4 Intention

Intention is defined as indicator of an individual's readiness to conduct a certain behaviour. It is about how willing the people will try and how much efforts they will plan in performing the behaviour (Ajzen, 1991).

2.1.5 Behaviour

Behaviour is acknowledged as the way in which an individual behaves in response to a particular situation or stimulus (Oxford Dictionaries, 2017).

2.2 Review of Past Studies

2.2.1 Attitudes

Since mid-1970s, consumers' attitude had been related with the study of consumer purchasing behaviour (Javadi et al., 2012). It is because attitude is the predictor that drives the behaviour intention and hence influences individual's behaviour (George, 2004). Moreover, attitude is an important element to explain and predict the choices of consumers on products and services (Ho, 2013, Voon et al, 2011 & George, 2004). In others words, an individual's preferences or behaviours can be identified by understanding their attitudes (George, 2004). As defined by Jung (1971), attitude is a psychological variable that shows the readiness of a person whether to engage in a particular act. It depends on the people's negative or positive evaluation about the certain behaviour (Ajzen, 1991). It indicates that attitude reflects peoples' positive or negative feeling towards a given behaviour (Javadi et al., 2012). In a nutshell, attitude towards behaviour can be defined as an emotional factor or personal factor that may affect an individual's positive or negative manner and hence influence their behaviour (Sultan & Uddin, 2011). It is a predictor of intention and lastly affects the actual behaviour of an individual (Ho, 2013).

Attitudes are divided into two dimensions which are hedonistic dimension and utilitarian dimension according to Voss, Spangenberg & Grohmann (2003), Spangenberg, Voss & Crowley (1997) and Batra & Ahtola (1990). For hedonistic dimension, consumption of behaviour is due to awaking, happiness, enjoyment and sensuality (Tsydybey, 2014). In short, the hedonistic consumers love to online shopping is because they enjoy the process of online shopping (Tsydybey, 2014). Shopping is not about completing a task for them (Dardenm & Griffin, 1994 & Bloch & Bruce, 1984). In contrast, utilitarian consumers' shopping behaviour is due to fulfilling certain goals or tasks (Tsydybey, 2014). For utilitarian dimension, task or mission, acquired benefits, completion of task, effectively completion of task are the things that mainly concerned by these utilitarian consumers (Tsydybey, 2014). Both of the hedonistic and utilitarian dimensions are the components of attitude and they are the strong predictors of intention for online shopping stated by Ajzen (1991) and Hansen (2008).

The measurement of attitude is by placing someone's position on an affective ranging which is from a very positive to very negative towards an attitudinal elements or objects (Ho, 2013). Hence, asking the individual to evaluate his or her concept of interest can help to measure their attitudes toward online shopping or e-commerce (Ho, 2013). There are several techniques used to determine attitude such as rating technique (five point or seven point Likert scale), ranking technique, sorting technique and choice technique (Ho, 2013).

From the review of past research, the attitude towards online shopping behaviour relies on how the consumers view the activities of online shopping and offline shopping (Soopramanien & Robertson, 2007). It means that if a consumer views the activity of online shopping as beneficial, he or she has a high possibility to make actual online purchases (Soopramanien & Robertson, 2007). In others words, attitude towards behaviour is influenced by the perceived benefits and perceived risks of online shopping (Azura, 2010). In conclusion, the perceived benefits is significantly related to attitude (Delafruez & Narges 2009). In contrast, perceived risks have a significant and negative relationship with attitude (Sinha & Kim, 2012). Online shoppers adopt online shopping channel instead of traditional shopping channel is because they are lazy and they think that adopting traditional shopping channel is time-consuming. Thus, they seek for convenience and time saving (perceived benefits) on online shopping platform. Besides, the rise of online scam cases caused by security problems will affect people's online shopping attitude due to security risks (perceived risks).

In a nutshell, many past research had indicated that the attitude towards online shopping will bring significant effects on individual's online shopping behaviour (Javadi et al., 2012). The previous studies including Choi & Geistfeld (2004) and Truong (2009) had showed that attitude is the strongest determinant for a person's intention to use online shopping channel. It is supported by the research of Ho (2013) that attitude is important because it can predict a person's intention and behaviour of online shopping. It signifies that a consumer's online shopping behaviour will be affected if the individual has a significant attitude towards online shopping (Javadi et al., 2012). The research of (Delafruez & Narges 2009) stated that attitude is significantly related to the intention level of online shopping of postgraduates in Malaysia. Thus, it can be concluded that if an individual has a favourable attitude towards online shopping, his or her intention of engaging in online shopping will be relatively high (Delafruez & Narges, 2009). It is

synchronized with the study of Jarvenpaa et al. (2000) in which the intention or willingness to online shopping is positively affected by the online purchasing attitudes and then eventually influence people's online shopping behaviour. In the study of Shwu-Ing (2003), it suggested that the higher the favourable or positive attitude towards online shopping, the higher the online shopping intention and then online shopping behaviour will be influenced directly.

2.2.2 Perceived Risks

According to the research of Sinha & Kim (2012), perceived risks refer to the amount or nature of risks that may be faced by the consumers during their buying behaviour. It refers to how much of the risks had been perceived by an individual when they are involving in the buying decision (Cox & Rich, 1964). There is a relationship between the level of uncertainty may occurred during the buying process and the level of perceived risks of consumers (Bhatnagar, Amit, Misra, Sanjog & Rao, 2000).

Before the consumers purchases a product, they will consider various risks that maybe associated (Javadi et al., 2012). The most common perceived risks of online shopping are security risks, convenience risk, product risks (Sinha & Kim, 2012) and non-delivery risks (Javadi et al., 2012).

By referring to the past studies, security risk is an important factor that causes people not to involve in online shopping (Javadi et al., 2012). Security risks refer to the risks of online transactions or leak of credit card's information (Sinha & Kim, 2012). The findings showed that security risks have a negative relationship with the online shopping attitude (Javadi et al., 2012). It means that the higher the security risks (risks of leaking of information of credit card or losing money), the lower the consumers' attitude and hence influence their behaviour towards online shopping according to Javadi et al. (2012), Biswas & Biswas (2004) and Forsythe & Shi (2003).

The non-delivery risks are the possibilities of non-delivery of the products to the consumers (Sinha & Kim, 2012). The findings from Javadi et al. (2012) shows that the lower the possibility of non-delivery risks, the higher the attitude of online shopping. Moreover, the findings also showed that non-delivery risks are significant and have negatively affected an individual's online shopping attitude (Javadi et al., 2012). Hence,

it has been proven that attitude will be influenced by the non-delivery risks (Javadi et al., 2012). It is because the consumers are worried about their ordered product will not be delivered to them (Javadi et al., 2012). Therefore, it might cause the consumers to be in troubles to collect their merchandise based on Egelin, Joseph & Johnson (2012) and Suki (2012).

Whereas, the convenience risks are the easiness and difficulty to exchange or order the product (Egelin, Joseph & Johnson, 2012 & Suki, 2012). It means that the difficulties to return the purchased merchandise (Egelin, Joseph & Johnson, 2012 & Suki, 2012). Product risks are the qualities of the product (Egelin, Joseph & Johnson, 2012 & Suki, 2012). It refers to consumers are unable to check the actual product, wrong product sent, low quality product and inappropriate product (Egelin, Joseph & Johnson, 2012 & Suki, 2012). Besides, it is also supported by the past research from (Javadi et al., 2012) that most of the consumers are worried about the products they received are not consistent to what they wish to buy. It is consistent with the findings of (Egelin, Joseph & Johnson, 2012 & Suki, 2012) that the consumers are worried that the products they received are broken or malfunction.

It is supported by the research of Bellman, Steven, Lohse, Gerald, Johnson & Eric (1999), Bhatnagar et al. (2000) that the risks that might occur before making a purchase is the factor that is concerned by the consumers. Unlike the perceived benefits, perceived risks are significantly negative to attitude towards. The lower the perceived risks, the lower the possibility for the consumers to seek for physical retailer (Tan, 1999). It is aligned with findings of Javadi et al. (2012) that the higher the perceived risks, the higher the possibility for the consumer to seek for brick-and-mortar retailer. In contrast, the higher the perceived benefits, the higher the possibility for them to shift from brick-and-mortar retailer to online shopping channel (Tan, 1999). It is synchronized with the findings of Javadi et al. (2012) that the higher the perceived risks, the lower the possibility of online shopping.

2.2.3 Perceived Benefits

Perceived benefits are believed as the influential factors for the consumers to adopt online shopping instead of brick-and-mortar retailer (Ho, 2013). It means that the choice of behaviour will be different based on the probability of specific consequence

of their taken action (Ho, 2013). The consumer's perceived benefits are comprised with their satisfactions of needs or advantage of online shopping which included convenience, easily access for information, time saving and price advantage (Shwu-Ing, 2003). In others words, the specific consequences, satisfaction or experience will affect the process of decision making of the consumers (Ho, 2013).

Attitude towards behaviour is believed to be mediated by the online shopping perceived benefits. The most popular perceived benefits that are shown in past studies are convenience, lower price, easy access for information, 24 hours services and cost saving according to Azura (2010) and Ho (2013). It is also supported by the research from Leyiario (2015) that the level of availability price advantage and convenience are the elements of perceived benefits that will influence the attitude of consumers. By referring to the research of Chen, Hsu & Lin (2010), convenience and time saving are the most important reasons that lead to the attitude of consumers to online shopping. It refers to the practice of online shopping that can reduce effort and time in the purchasing process (Chen, Hsu & Lin, 2010). These findings are fond to be synchronized with the findings of the research of Ho (2013) in which convenience is significant and positively related to the attitude of online shopping.

Besides, it is supported by the research of Schaupp & Belanger (2005) that e-commerce is a platform for online shopping to reduce the time and effort of buying process. Besides, it is also supported by the research of Nazir et al. (2012) that the ease of use and convenience are the factors that make online shopping better than the traditional shoplet. Whereas, the research of Ngugi (2014) showed that ease comparison of product, time saving, price advantage and convenience are the reasons for the adoption of online shopping.

By referring to the findings of Delafrooz & Narges (2009) and Vijayasarathy & Jones (2000), perceived benefits are significant and they have a correlation with attitude among the university students in Malaysia. It is synchronized with the findings of Limayen et al. (2013) that consumers' attitude is significantly affected by the perceived consequences and hence affect their intention for online shopping. In short, if an individual perceives benefits (positive consequences), then he or she may adopt online shopping channel (Ho, 2013). In contrast, the individual may not adopt online shopping channel if he or she perceives online shopping (Ho, 2013). It is supported by the

research of Kurnia & Jenny (2003) that perceived usefulness is positively related to the attitude towards online purchasing and hence influence an individual's intention and the actual behaviour. Moreover, the research of Forsythe, Petee & Kim (2002), also stated that the perceived benefits are the significant factors that influence the online shopping intention among Generation X and Y in Malaysia. Followed by the research of Forsythe et al. (2002), it showed that perceived benefits will positively affect the time spent and frequency for online.

2.2.4 Subjective Norms

Subjective norms are the second driver that influence the online shopping intention and hence influence a person's actual online shopping behaviour (Orapin, 2009). It is a determinant related to intention because the acts of people are usually influenced by the perceptions, judgments or opinions of people important to them such as family, friends and peers (Javadi et al., 2012).

Subjective norms are one of the determinants of intention because these significant factors will affect people's intention and their behaviour (Javadi et al, 2012). According to Ajzen (1991) and Orapin (2009), an individual's behaviour may be influenced by the external element like social pressure. People will usually act based on their own perceptions of how people think they should be doing (Javadi et al., 2012). So, social normative pressure or others' perceptions are the factors that will affect an individual to perform a particular behaviour (Sultan & Uddin, 2011).

From the findings of Javadi et al (2012), the results showed that a person's online shopping intention is affected by the opinions of their family and friends. Besides, the research had proved that an individual will intend to online shopping when their friends provide them opinion that regarding to online shopping and will follow the action of online shopping of their friends (Javadi et al., 2012). Moreover, another study had shown that subjective norms are the determinant of people's intention and behaviour of online shopping. It is supported by the research of Lim, Osman, Salahuddin, Romle, & Abdullah (2015) which stated that the university students' purchase intention will be affected by the subjective norms such as perceptions of their friends, family and media. While research from Harn, Khatibi, Ismail (2006) and Jamil & Mat (2011) agreed that it is suitable to be applied in Malaysia context due to its culture and adverse to change.

The findings of past research showed that subjective norms is positively related to online shopping intention (Javadi et al., 2012). It means that the more the people share online shopping experience with each other, the more it will affect others' online shopping intention and hence influence the likelihood of others to engage in online shopping behaviour (Javadi et al., 2012). More importantly, most of the research indicated that subjective norms does not have direct relationship with consumer behavior (Lim et al, 2015). It is synchronized with the research of Limayem, Khalifa & Frini (2000), Choo, Chung & Pysarchik (2004) and Jamil & Mat (2011) and (Zhou, 2011) that subjective norms will influence the intention first before influencing actual buying behaviour. The results showed that media, families and friends have major influences on people's online shopping intention, but there is minor influence on their actual buying behavior (Lim et al., 2015). It is also supported by the research of He et al (2008) that the consumers' buying intention is significantly affected by the third party which is subjective norm. As a conclusion, majority of the findings from Xie, Zhu, Lu & Xu (2011), Jamil & Mat (2011), Siti, Mohammed, Kamariah (2012) and Leeraphong & Mardjo (2013) show that purchase intention does significantly influenced by the subjective norms and hence influence the online shopping behavior.

2.2.5 Perceived Behavioural Control

Perceived behavioural control is a new construct in TPB (Javadi et al., 2012). It is one of the determinants which helps to determine both of the intention and behaviour (Javadi et al., 2012). Perceived behavioural control is defined as how the consumers perceive and look at themselves in terms of their capability to perform a behaviour (Javadi et al., 2012). In others words, it is defined as how an individual perceive to perform a given behaviour, whether it is easy or hard for them to perform that particular behaviour (Sultan & Uddin, 2011). In a nutshell, perceived behaviour control is the perception of an individual about the difficulty or easiness to perform a particular behaviour (Sultan & Uddin, 2011).

The important constraint which is self-efficacy can be reflected through perceived behavioural control (Javadi et al., 2012). It is supported by the study of Bandura (1982, 1991) that chosen of activities, preparation for activities, effort spent during the performance and emotional reactions are all influenced by the self-efficacy. It can be

understood that if an individual is confident on his or her ability (perceived behavioural control), then there is a high possibility for the individual to conduct the actual behaviour (Ajzen, 1991). The study from Sinha & Kim (2012) had suggested that ownership of credit card and accessibility of internet are also the elements of ability (perceived behavioural control) which may affect their online shopping behaviour. While Ajzen (1991) concluded that the ability of the consumers will affect their behavioural decision making.

According by George (2004), the findings of the study showed that people's online shopping behaviour is directly affected by perceived behavioural control. It indicated that perceived behavioral control is significantly and strongly related to the actual online purchasing (Khalifa & Limayem, 2003). According to Ajzen (1991), behavioural achievement can be predicted through perceived behavioural control and behavioural intention. Both of these two elements are the influential factors on consumer behaviour (Ajzen, 1991). The actual consumer behaviour can be influenced by the perceived behavioural control with the absent of intention (Ajzen, 1991). For instance, if there are two people having the same level of intention on learning ski, the one with higher confidence on his or her own ability may be perform better than another one who has lower confidence with his or her own ability (Ajzen, 1991). In a nutshell, it is expected that there is a direct link between the perceived behavioural control and actual behaviour (Ajzen, 1991). Thus, perceived behavioural may directly influence the actual behaviour by skipping the intentions because it could be a substitute for actual control (Ajzen, 1991).

2.3 Proposed Research Model

Proposed Conceptual Framework

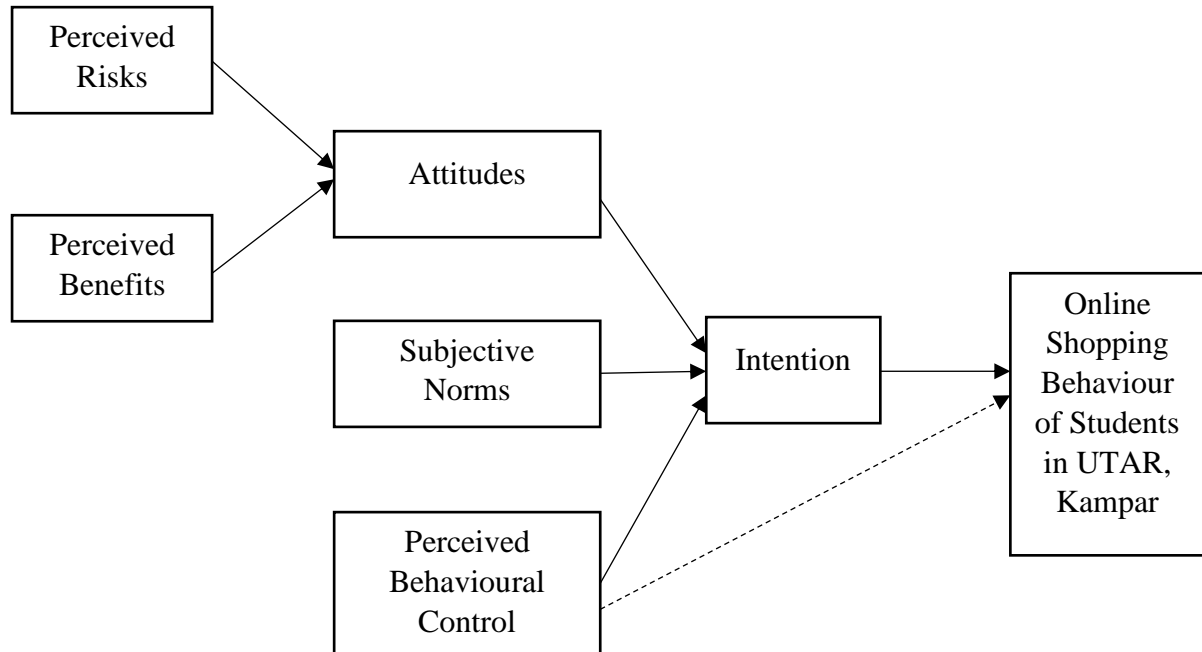


Figure 2.3

Source: Developed for the purpose of study

The diagram shows the theoretical framework which is applied in this research. The independent variables (IV) for this study are attitudes, subjective norms and perceived behavioural control. While online shopping behaviour of students in UTAR, Perak campus is known as the dependent variable (DV) for this research.

2.4 Operational Definition of Variables

Variables	Types of Variable	Indicators	Measurements	Data Collection Tools
Attitudes	Independent	Favourable or unfavourable	Level of favourability towards online shopping	Survey questionnaire

		attitudes toward online shopping	Level of enjoyment in online shopping	
Perceived Risks	Independent	Security risk	Level of security risk	Survey questionnaire
		Product risk	Level of product quality	
		Convenience risk	Level of difficulty settling disputes	
		Non-delivery risk	Level of non-delivery risk	
Perceived Benefits	Independent	Convenience	Level of convenience	Survey questionnaire
		Availability	Level of availability Ease to get information	
		Time Saving	Amount of time saved	
Subjective Norms	Independent	Family & Friends & People of importance & media	Level of importance of opinions	Survey questionnaire
Perceived Behavioural Control	Independent	Confidence in online shopping	Level of confidence in online shopping	Survey questionnaire
		Debit/Credit Card	Ownership of debit/credit card	
		Accessibility of Technology	Availability of technology	
		Accessibility to Internet	Accessibility to Internet	
Intention	Mediator Variable	Intention to future online shopping	Level of intention to future online shopping	Survey questionnaire

		Intention to online shopping	Level of intention to online shopping	
		Continuance intention to online shopping	Level of continuance intention to online shopping	
Behaviour	Dependent	Frequency of online shopping	Level of online shopping frequency	Survey questionnaire
		Expenditure on online shopping	Level of expenses on online shopping	
		Online shopping platforms	Level of variation of online shopping platforms	
		Product categories bought online	Level of variation product categories bought online	

2.5 Background of Online Shopping

2.5.1 E-Commerce

Electronic commerce or E-commerce has been rapidly expanded over the past five years (Franco & Regi, 2016). E-commerce is a tactic used in the business which is small and medium size (SMEs) to rapid growth (Grandón, Nasco & Mykytyn, 2011). E-commerce serves as a business space on the internet by using the process of purchasing, selling, distributing, marketing and servicing of a product or service through internet (Omar & Anas, 2014). E-commerce is considered as an evolution to enhance the participation of customers and to achieve a greater economic value (Huang & Benyoucef, 2013). Currently, e-commerce is one of the fastest growing marketing channels for multiple types of products for customers (Schöder, Ding & Campos, 2016). E-commerce is unlike the traditional information system, e-commerce consists of characteristics of both which is information system and marketing channel, as a result it is involving both elements of human and machine that subsumed in the computer or interface of human (Hausman & Siekpe, 2009). E-commerce has being argued that it is

potentially to increase the value of businesses and improve the living standards of residents in developing countries (Kshetri, 2007).

According to Yoon (2009), e-commerce has proliferated rapidly even in developing countries. Yoon (2009) also mentioned that e-commerce is international nowadays so that the national culture could affect the customers' behaviour. However, e-commerce still has some barriers in three categories of negative feedback systems including economic that caused by the speed of internet would influence the performance of IT, socio-political that caused by lacking e-commerce's business laws or inadequate legal protection for Internet purchases and cognitive caused by the inadequate knowledge, awareness, confidence and skills (Kshetri, 2007).

2.5.2 Development of E-commerce in Malaysia

In Malaysia, e-commerce acts as a new medium due to the communities prefer to purchase directly and transact face to face without using ICT technologies such as the Internet (Omar & Anas, 2014).

Actually, ICT exists in Malaysia for a long time of period and Malaysia has emphasized on the ICT development by introducing the Multimedia Super Corridor (MSC) in 1996 (Omar & Anas, 2014). In January 2006, customers are required to pay their bills through online by the government due to government wanted to implement e-commerce in Malaysia (Country Commerce, 2005). In year 2016, Malaysian Ministry of International Trade and Industry (MITI) had implemented a new e-commerce initiative that aimed to motivate eighty percent of small and medium size enterprises into e-commerce world (Export.gov, n.d.). E-commerce is growing quickly in Southeast Asia which represents about 2% of all sales in Malaysia (Insights and trends of e-commerce in Malaysia, 2017).

Data from Department of Statistic Malaysia, Official Portal, total value added of e-Commerce in year 2014 is up to RM63.8 billion. It had been increased for RM8.6 billion from year 2013 (Information and Communication Technology Satellite Account, 2010-2014, 2015). There are 55.2 in 2013, 49.8 in 2012, 44.6 in 2011, and 37.7 in 2010 (Information and Communication Technology Satellite Account, 2010-2014, 2015). It proves that e-commerce value added in Malaysia is increasing rapidly year by year.

E-Commerce in 2014 was registered as 15.7 per cent as against 10.8 per cent in 2013. (Information and Communication Technology Satellite Account, 2010-2014, 2015). But, it declined to 11.6 per cent in 2012 and grew to 18.2 percent in 2011. (Information and Communication Technology Satellite Account, 2010-2014, 2015).

2.5.3 Online Shopping

Since the late of 1990s, online shopping is becoming popular as the number of customers that purchasing various of products through the internet is increasing (Zhou, Dai & Zhang, 2007). Online shopping refers to obtain the information of product, purchase the goods through online shopping websites, as well as key in the personal information details and account numbers of credit card to make payment, after that manufacturers would delivery to home by courier or shipped by mail order (Chen, Xie & Jing, 2011).

Online shopping also refers internet shopping, digital shopping or online buying. It can be known as the process of buying merchandise through online (Mastercard Worldwide Insights, 2008). It is also a modern retail channel that leads to the increase of commercial traffic (Schöder, Ding & Campos, 2016).

In other word, online shopping is an action as well as activity of purchasing products and services in the Internet (Market Business News, 2017). The process is going online, landing on a seller's website, selecting something, and arranging for its delivery after that the buyers have to make payment for the goods or service online with a credit or debit card or upon cash on delivery (Market Business News, 2017).

Online shopping is the most famous activities in the internet (Keisidou, Sarigiannidis & Maditinos, 2011). According to Top e-commerce sites in Malaysia 2017 (2017), the top one website that people purchase online is Lazada Malaysia with 30,300,000 visitors monthly on Jun 2017, followed by 11street Malaysia which has 10,200,000 visitors per month and following by Lelong.my, with 6,200,000 visitors (Top e-commerce sites in Malaysia 2017, 2017).

2.5.4 Advantages of Online Shopping

Online shopping has become the norm as people prefer to shop online due to there are many advantages in online shopping (Ahmad, Omar & Ramayah, 2010). Nowadays, online shopping is more and more being accepted by internet users because of its fast speed, convenient, efficient as well as economic advantage (Chen, Xie & Jing, 2011).

Internet shopping is able to fulfil some consumers' needs by more efficiently and effectively comparing with the conventional shopping such as browsing the produce with less effort and time investment (Monswé, Dellaert & Ruyter, 2004). Besides, the advantages of shopping through online including time saving, energy saving, broader selection, price advantage, convenience and higher accessibility to the products or services' information (Lin, 2007). Furthermore, convenience, products price that sold online is lower, and easy way in purchasing are the advantage of online shopping (Clemes, Gan & Zhang, 2014). In addition, online shopping can benefit consumers in terms of spending lesser time to shopping and this is a major element that make them to purchase online (Jiang, Yang & Jun, 2013). People can place their orders and directly purchase at online at anywhere and anytime. (Rohm & Swaminathan, 2004). Rohm and Swaminathan (2004) also mentioned that online shopping is an infrastructure that enables the customers to search, compare and access to the related information more easily. Another advantage of online shopping is the customer can fulfil the feeling of having products delivered to home and their purchases would be private (Clemes, Gan & Zhang, 2014). Therefore, online shopping has becoming a part of people's daily lives (Noort, Kerkhof & Fennis, 2008).

2.5.5 Disadvantages of online shopping

One of the cons of online shopping is consumers cannot experience the same level of fun by traditional shopping channel. This is because the customers do not able to control their computer interaction when online shopping and it causes the failure of stimulating the consumers' curiosity and their imagination (Suki, Ramayah & Suki, 2008).

The lack of face-to face interaction will cause the customers not willing to purchase online because it would obstruct their opinions toward the credibility of online shopping retailers (Lin, 2007). Due to the inability to interact directly with the salesperson and

the online shopping relies on the electronic payment methods would increase perceived risk that regarding to online shopping (Chang & Chen, 2008).

Online purchase has relatively higher risk and uncertainty as compared with the physical stores because physical stores usually involve face to face interaction with customers (Chiu, Hsu, Lai & Chang, 2012). Furthermore, the online information of fashion and fashionable products might not be up-to-date as compare to the traditional stores (Suki, Ramayah & Suki, 2008).

Moreover, online buyers may not be physically inspect the product (Hasan & Rahim, 2008). Online shopping could not provide the psychosocial need to the shoppers, meaning that some of them could not receive sensory stimulation from the retail environment (Rohm & Swaminathan, 2004).

Other disadvantage of online shopping is false information such as cheap temptation which means the seller is using the price that is cheaper than market price to cheat the customers and selling second-hand or defective product to them with high prices which refers to some illegal web pages or websites use valuable prizes or a huge sums of money to attract people to browse their webpages or websites and purchase their products (Chen, Xie & Jing, 2011). Furthermore, the product that is purchased from online is lack of a guarantee of quality (Clemes, Gan & Zhang, 2014).

2.5.6 Online Transaction

Online transaction is also coined as PIN-debit transaction which is a password-protected payment method. It authorizes a transfer of funds by an electronic funds transfer (EFT) (Online Transaction, 2018). Online transactions definitely would benefit the consumers in terms of reducing their searching costs and also eliminating the physical distance among the retailer with the customers (Chun, Cho & Subramanyam, 2016).

Online transaction is very important because a trusted online transaction is able to determine the success of e-commerce (Kim & Kim, 2005). The online transactional activities includes bill pay, funds transfer, loan applications and transactions (Dagar, 2014). These transactions activities are faster and convenient (Franco & Regi, 2016). The advantages of online transaction is easy to use and efficient for online shoppers;

while its disadvantage is financial and personal problems if the servers are being hacked as the databases are storing all the data of users and their account information (Advantages And Disadvantages of Online Transaction Processing Systems, 2015).

2.5.7 Abandonment Rate

Abandonment rate is one of the most broadly used online user satisfaction metrics (Chuklin & Serdyukov, 2012). Nowadays, high abandonment rates of online transactions continue to be a concern (Dai, Forsythe & Kwon, 2014). According to Abandonment Rate-Glossary (n.d.), e-commerce sites are calculating the abandonment rates by using the formula below typically:

$$AR = (1 - \frac{\text{Transactions Completed}}{\text{Transactions Initiated}})$$

Appendix D

This formula is used in the calculation of abandonment rate. The percentage according to the number of people who initiate a transaction and the final amount of these individuals who actually completed the transaction. (Abandonment Rate-Glossary, n.d.). A common cause of abandonment is the user does not have time to complete the order process (Abandonment Rate-Glossary, n.d.).

2.5.8 University Students

According to The Malaysian Higher Education System-An Overview (2015), there were 20 public universities and 53 private universities in Malaysia in 2015. Malaysian universities students are diverse religiously and culturally, the current populations are approximately 61% Malay, 25% Chinese and 7% Indian (Bonn & Tam, 2016).

Pupils who wish to continue the tertiary education after graduated from secondary school are required to fulfil the post-secondary qualification. For instance, STPM level, matriculation programmes, GCE Advance levels, foundation and diploma level (A Glance at the Malaysian Education System, 2015).

According to A Glance at the Malaysian Education System (2015), the duration of post-secondary education or pre-university is around one to two years from age 17; while university undergraduate study includes Bachelor of Degrees; postgraduate studies include master degrees and Doctor of Philosophy (PhD). Stated in Degree Options in Malaysia (n.d.), degree programs are often studied by students who are aged from 19 and above and the duration of the studies is 3 to 5 years.

2.5.9 Online Scams

There are millions of people all around the world are being targeted with scams by thousands of fraudsters everyday via internet and other related technologies (Button, Nicholls, Kerr & Owen, 2014). Scam is a scheme where an individual tricks other individuals with false information in a deal or offer in order to gain quick-profit (Free Internet Security, n.d.). According to Scamwatch that run by Australian Competition and Consumer Commission (ACCC), online shopping scams is defined as scammers pretending as an authorized online sellers together with a phishing website or showing fake advertisement on a real retailer site (Online shopping scams, 2015).

There are large amount of variation in the online information and it is anonymity, thus internet is used as a platform that provides scam artists opportunities to entice larger number of victims in online (Cheema & Papatla, 2010). Scams are increasing each year and they have affected more unsuspecting web surfers (Featherman, Miyazaki & Sprott, 2010).

Online scam is a serious issue because a person who disclose his or her financial details to scam sites would cause monetary losses or other negative consequences (Kirlappos & Sasse, 2012). Besides, online scam is one of the negative outcomes of consumers' expectations in online market (Youn, 2009).

The reason of people falling into online scams is due to many of the fraudsters practice the principle of "small amounts and mass targeting". This is because the small amount of money would not make the victims report this scams, additionally it is a time-consuming process. While another reason of falling into the scam is because authority and legitimacy which means the website looks like an official websites for shoppers and it has reference or logo of famous legitimate companies. As a result, this could

make the people to believe the fraudulent website (Button, Nicholls, Kerr & Owen, 2014).

CHAPTER 3: METHODOLOGY

This chapter includes the research design, research method, population, sample and sampling procedures, pilot test, data collection method, research instrument, ethical consideration, validity and reliability of instrument, and data analysis techniques.

3.0 Research Design

Kerlinger (1973) stated that research design is the structure, plan and investigation strategy to collect answers for research questions. It is important to a study because it can reduce the expenses, ease the scaling, collect the pertinent data and technique, provide outline for plans and overview to other researchers and provide a direction to them (Pandey & Pandey, 2015).

This study was conducted to determine the factors that influence the online shopping behaviour of students in UTAR, Perak campus. Quantitative research had been chosen to carry out this study to quantify the independent variables which would influence the online shopping behaviour of the respondents. The data was presented as descriptive terms to be evaluated (Lazar, Faciu, Mata & Lazar, 2016). Therefore, it can identify the relationship between independent variables (IV) and dependent variable (DV) (Hopkins, 2000).

The quantitative data of this study was obtained through survey method as it can best describe the viewpoints of a larger sample toward a particular event (Helvaci, 2015). The data was then processed by Statistical Package for the Social Sciences (SPSS) to produce the results and manipulated into findings. The research instrument is known as self-administered questionnaires. This research falls under descriptive study and it is deemed to be a cross-sectional study because the data is obtained all at once (Cherry, 2017).

3.1 Research Method

Research methods refer to the procedures and techniques involving in data collection and analysis as well as interpretation (Gelo, Braakmann & Benetka, 2008). Quantitative research is a specific method in surveying and experimentation (Williams, 2007). It is a method that enables the data to be analysed numerically, and the results are usually shown by tables,

statistics and graphs through the collection of information (Qualitative and Quantitative Research Techniques for Humanitarian Needs Assessment, 2012).

In a research, quantitative content analysis is useful in showing a crude overall picture of which of the materials that are being reviewed and indicating the frequency of terms (Brown, 2009). Besides, quantitative research can determine the relational questions between variables in the study (Williams, 2007).

In quantitative method, questionnaire will be used as an instrument in doing research and generate result by data. As a result, data is able to use in objectively measure the reality (Williams, 2007).

Therefore, quantitative research method is suitable in this study due to it enable to analyse the relationship between independent variables and dependent variable and present the findings in a numerical form.

3.2 Population, Sample and Sampling Procedures

3.2.1 Target Population

Population can be known as a collection of units such as people, items, organization and so on (Goldstein, Lynn, Muniz-Terrera, Hardy, O'Muircheartaigh, Skinner & Lehtonen, 2015). Population is crucial in a study as it helps to determine the specific group that are related to the research (Zikmund, 2003).

In this research, foundation students and undergraduates in UTAR, Perak campus who have at least once online shopping experience are the targeted respondents. This is due to these students are generally known as Generation Y who were born between 1981 to 1999 (Parasuraman et al., 2013). Generation Y is reported as the most active users in online shopping.

According to Malaysia education.info, university falls under the category of tertiary education. Tertiary education is a term to represent the education after the secondary level and it is labelled as degree level in the education. Generally, higher education learning takes place at universities, colleges or institutions in which the students can get academic degree and professional qualifications (Esal & Kannapiran, 2014). The colleges' students may start the education from the age of 18; while students who

pursue Bachelor's degree programmes are usually from age 19 or 20 for three to five years until graduated (An Overview of the Education Structure in Malaysia, n.d.).

3.2.2 Sampling Frame and Sampling Location

According to Zikmund & Babin (2010), sampling frame is considered as a list of elements from which a sample selection is drawn. Each sampling unit from the sampling frame has equal likelihood to be selected as the targeted respondents of the study. However, sampling frame had not been adopted in this study due to limited resources.

In this study, the target respondents are the foundation students and undergraduates in Universiti Tunku Abdul Rahman (UTAR), Perak campus, Malaysia. Therefore, the survey questionnaires were conducted in UTAR, Kampar and a sum total number of 390 questionnaires were given randomly to the target respondents who has at least one actual experience in online shopping.

3.2.3 Sampling Size

Sample size is the amount of selected target respondents (Zamboni, 2017). The greater the number of sample size, the higher the accuracy of the true population mean (Babikir, Ali & Wahab, n.d.).

The sample size of this research is 390 respondents who were selected from UTAR, Kampar. A sum total of 390 questionnaires were given randomly among the foundation students and undergraduates in UTAR, Kampar who have at least one actual experience in online shopping to determine the factors that influence their online shopping behaviour. Questionnaires will be distributed to the sample, and then they will be instructed to fill up the questions.

The sample size for this research is determined by applying the Slovin's Formula. The formula of the calculation of the sample size is shown below:

$$n = \frac{N}{1 + Ne^2}$$

Where,

n = sample size

N = total population = 15500 respondents

e = confidence level

= Standard confidence level is 90% - 95%. The confidence of 95% has a higher accuracy which provides a margin error of 0.05 (Singh & Masuku, 2014).

The calculation of the sample size for this study is shown below:

$$\begin{aligned}n &= 15500 / 1 + 15500(0.05)(0.05) \\&= 15500 / 39.75 \\&= 389.937 \\&= 390\end{aligned}$$

As a result, the sample size representative of the students is 390. Therefore, the sample size required to be representative of 15500 students in UTAR, Perak campus is 390.

3.2.4 Sampling Techniques

Nonprobability sampling had been chosen as the sampling technique in this study. This is because nonprobability sampling does not refer to the act of random select from the population of interest in a mathematically random way. The advantages of using nonprobability sampling are less expensive and it can be implemented more quickly as compared to probability sampling (Michael, 2011). Therefore, the sampling method chosen in this research is purposive sampling.

Purposive sampling can be defined as judgmental sampling or expert sampling (Michael, 2011). Besides, it also tends to aim on the particular characteristics of the targeted respondents whom are able to contribute to the related research (Etikan, Musa & Alkassim, 2016). The main purpose choosing purposive sampling as our sampling techniques is because of it can produce a sample that can be considered as the

representative of the population. Normally, the purposive sample that be selected is often apply with the expert knowledge of the population (Michael, 2011).

Therefore, purposive sampling had been chosen as the sampling method for this study due to every student in UTAR, Kampar campus were selected to be the targeted respondents and students who have at least one experience of online shopping are purposely to be selected to be the sample for this study.

3.3 Pilot Test

A pilot test was carried out before distributing the actual questionnaires to the targeted respondents in order to test the reliability of each variables, to discover the weaknesses and errors made in the questionnaires and to ensure the instructions and all the questions are clear and understood by them. Pilot test refers to a small study that helps in preparing for a confirmatory study (Arain, Campbell, Cooper & Lancaster, 2010).

According to Johanson, & Brooks (2010), thirty representative respondents from the population of interest are believed to be enough for a pilot test. So, total of 50 sets of questionnaires were distributed for the pilot testing purpose to the targeted respondents on 15th January 2018. The respondents' feedbacks were collected to remove the grammatical mistakes and errors of the questionnaires and improve the quality of the questionnaires.

Table 3.3 Cronbach's Alpha Coefficient Values for Pilot Test

Constructs	Number of Items	Cronbach's Alpha Coefficient
Attitudes	5	0.874
Perceived Risks (PR)	12	0.886
Perceived Benefits (PB)	9	0.881
Subjective Norms (SN)	5	0.705
Perceived Behavioural Control (PBC)	5	0.701
Intention	3	0.839
Behaviour	4	0.911

Source: SPSS

From Table 3.3, the range of pilot test's Cronbach's Alpha coefficient values for all constructs are within 0.701 to 0.911. Therefore, all the constructs are considered as reliable score as they are greater than the scale of 0.7 (Heale & Twycross, 2015).

3.4 Data Collection Method

Data collection is defined as the process of collecting and measuring data in a study. Primary data and secondary data are the two categories of data that can be gathered by researchers. In this study, primary data was used to test and evaluate the research questions made.

3.4.1 Primary Data

In this research, primary data was obtained by survey questionnaire. Primary data is defined as the first-hand information which is acquired by the researcher directly (Sekaran & Bougie, 2013). The use of primary data in this study is to collect the information that is relevant to the research questions and to address the research problem (Surbhi, 2016). Primary data collection allows the researchers to determine the factors (attitudes, subjective norms and perceived behavioural control) influencing the respondents' online shopping behaviour. The data was obtained from the respondents who are foundation students and undergraduates in UTAR, Kampar. In data collection, survey questionnaire was used due to it can gather data from a large sample efficiently (Wong, Ong & Kuek, 2012). Self-administered approach will be used in administering the questionnaires to the respondents through Paper-and-Pencil Survey (Sincero, 2012).

3.5 Research Instrument

The instrument of this research is survey questionnaire. It was carefully selected and adopted from previous empirical studies to verify the validity and reliability of the variables. The questionnaire consists total of 52 items and it is separated into 2 sections known as Section A and B. The latter consists of several sub-sections in which each of it are to examine each of the variables of this study.

The Section A of the questionnaire is about demographic questions such as gender, age, faculty of study or foundation programme, course and a screening question about the online

shopping experience of the respondents. The purpose of including screening question is to filter the data collected from the respondents who do not fulfil the requirement (at least have one online shopping experience) to make sure the data is accurate enough. Thus, the data was only collected from the respondents who answered “Yes” for the particular question due to purposive sampling was applied in this research. Additionally, there are several questions regarding the frequency, duration, estimated expenditure spent of online shopping and types of items that purchase online are provided in Section A.

The Section B contains 7 sub-sections (Section A, B, C, D, E, F, G) in the questionnaire of this study to examine all the variables. The first sub-section in Section B consists of total of 5 questions related to attitude. Besides, there are 12 questions that are related to the perceived risks and 9 questions relevant to perceived benefits are tested in the second and third sub-section in Section B respectively.

There are another 4 sub-sections (I, II, III, IV) under perceived risks part which are security risks, product risks, convenience risks and non-delivery risks are prepared to test the relationship between perceived risks and attitudes of the respondents. Besides, there are also 3 sub-sections (I, II, III) under perceived benefits part including convenience, availability and time saving. Each question was adopted from the past studies’ questionnaires and placed into the appropriate sub-sections to ensure the reliability and validity of questionnaire. The respondents were asked to rate their answers referring to five Likert point scale (strongly disagree to strongly agree).

Followed by the third sub-section (Section D) under the Section B of the questionnaire. There are 5 items relevant to subjective norms are provided in this particular section. In addition, the fourth sub-section (Section E) in Section B has 5 questions that are related to perceived behavioural control. The respondents were also asked to rate their answers based on the Likert five point scale.

Lastly, there are only 3 questions that are relevant to intention in the sixth sub-section in Section B, whereas total of 4 questions are provided in the seventh sub-section in Section B of the questionnaire. Respondents were asked to answer the questions that are related to the mediated variable (online shopping intention) in the sixth sub-section and dependent variable (online shopping behaviour) in seventh sub-section with the application of the Likert five point scale.

3.6 Ethical consideration

Ethics can be defined as a moral principles that control the attitude of the person or the conducting of an activity (Oxford Dictionary, 2018). It known as the principles that able to help someone to change their previous considerations critically about choices and someone's intention. It refers to the branch of philosophy which is used by the researcher to know the decision making by someone to examine that which is right and which is wrong.

In the scientific research work, all of the human daily activities are managed by community, an individual, and even the values of the society. The daily work that involved in the research should be required to take part in the ethics of the research as the information of the research and dignity of the subject have to be protected while conducting a research (Fouka & Mantzorou, 2011).

In the fundamental of the ethical principles, scientific research should involves ethical research. In fact, there are various type of issues regarding to ethical in the scientific research. There is an ethnical evaluation to make while researchers are conducting research and it is also always taken wrongly by the researchers as hindering the scientific progress. The ethnical of the research should be collaborative and constructive which reported by European Commission. Furthermore, if the researcher take ethics consideration at the conceptual stage, the quality of the research that be conducted will be enhanced (European Union, 2013).

Three ethical considerations will be emphasized in this research. These are the three of many ethical considerations when involving individual participants in every primary research (Driscoll, 2011).

a) Voluntary participation and informed consent

Permission from the respondents must be approved before involving them in any research. Voluntary of participation has to be placed in the priority when doing a survey or distributing questionnaires to the respondents. For the informed consent, it is closely related to voluntary participation. In addition, informing potential subjects or respondents about all the features of this research must be completed (Driscoll, 2011).

b) Confidentiality and anonymity

Researchers have the responsibility to assure that the identities of participants be anonymity when concluding the results that are collected from the respondents. This is because the participants may feel embarrassing when they are exposed to issues such as racist comments or unconventional behaviour (Driscoll, 2011).

c) Researcher bias

Researchers must have ethical obligation and never conceal any when collecting the data from the respondents. The act of bias might influence the interpretations of the findings (Driscoll, 2011).

3.7 Validity and Reliability of Instrument

3.7.1 Validity and Reliability

In every survey procedure, validity and reliability are the fundamental characteristics (Hon & Tsz, 2015). People always concern and doubt the findings of a study is true or untrue. Validity is the extent to which whether the test measures what the researchers plan to measure (Leyiario, 2015). When the questionnaire is fully adapted from the past empirical studies in the same area of study, it is considered as valid (Hon & Tsz, 2015 & Sultan & Uddin, 2007).

On the other hand, the Alpha model is used to determine the reliability of each construct in this research (Ho, 2013). Hence, Cronbach's alpha is the coefficient that is used in the analysis. For Cronbach's alpha, 0.7 is the minimum value (Hon & Tsz, 2015). The value that is 0.7 or higher than 0.7 can ensure the reliability of the constructs. In contrast, the scale is considered as not reliable if the value is lower than 0.7 (Hon & Tsz, 2015).

Moreover, the descriptive statistics is used to measure the data of quantitative research (Yoldas, 2011). It will go through a coding process where raw data obtained is processed into numerical form using a computer software "Statistical Package for Social Science" (SPSS) which is a popular program for statistical analysis (Yoldas, 2011). The SPSS program was used to generate the accuracy of raw data to make sure the reliability of the results in this research (Yoldas, 2011). After the raw data had been

key in into SPSS program, the numerical data was presented in the form of diagrams, bar chart, pie chart ,tables and more (Yoldas, 2011).

3.7.1.1 Reliability Test

Table 3.7.1.1 Cronbach's Alpha Coefficient Values for Reliability Test

Variable	Constructs	Number of Items	Cronbach's Alpha Coefficient
Independent Variable 1 (IV1)	Attitudes	5	0.850
Independent Variable 2 (IV2)	Perceived Risks (PR)	12	0.794
Independent Variable 3 (IV3)	Perceived Benefits (PB)	9	0.821
Independent Variable 4 (IV4)	Subjective Norms (SN)	5	0.710
Independent Variable 1 (IV5)	Perceived Behavioural Control (PBC)	5	0.715
Mediator Variable (MV)	Intention	3	0.876
Dependent Variable 1 (DV)	Behaviour	4	0.857

Source: SPSS

The Table 3.7.1.1 indicates the results of reliability test. All the variables were tested in order to ensure the validity and reliability of the instrument. The Cronbach's Alpha coefficient values for all constructs are within the range of 0.710 to 0.876 which are considered as reliable as the values all fall under the acceptable range of 0.70 to 0.95 as suggested by Tavoko & Dennick (2011). Intention has achieved the highest which is 0.876 out of all the variables, whereas subjective norms has the lowest Cronbach's Alpha coefficient value of 0.710.

3.8 Data Analysis Techniques

3.8.1 Descriptive Analysis

According to Salkind (2017), descriptive analysis or descriptive statistics are defined as a data analysis techniques that are used in organizing and describing the characteristics of the data collected by the researchers. Descriptive analysis is used in this research because it can represent the characteristics of a huge amount of data collected (Salkind, 2010). Besides, this analysis technique allows transforming the raw data into the presentation of numerical facts by analysing samples' demographic profiles (Zikmund, Babin, Carr & Griffin, 2013). Quantitative descriptive analysis also simplifies the collection of data by determining the data patterns in order to characterize a phenomenon (Loeb, Dynarski, McFarland, Morris, Reardon & Reber, 2017). Therefore, descriptive analysis was used in this research.

3.8.2 Normality Test

Normality test is a formal procedure whereby it examines whether a data follows a normal distribution (Razali & Yap, 2010). It is used for the study on distribution of all the independent variables and dependent variable of the research. As suggested by Brown (2011), the distribution of the items for each construct has to be normal, so that researchers can obtain a more accurate and higher reliability and validity results. In this research, skewness and kurtosis values are used to analyze the normality of the distribution. As recommended by Garson (2012), the items of each construct are implied as normally distributed when the skewness and kurtosis values fall within the acceptable range of -2 to 2.

3.8.3 Inferential Analysis

3.8.3.1 Pearson Correlation Analysis

Pearson Correlation Coefficient (r-value)	Strength of Correlation
0.00 – 0.19	Very weak
0.20 – 0.39	Weak
0.40 – 0.59	Moderate
0.60 – 0.79	Strong

0.80 – 1.00	Very strong
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Source: (Evans, 1996)

In order to verify the relationship between the variables, Pearson correlation was applied in this study (Hon & Tsz, 2015). In other words, the strengths of the relationships in this research between the variables were identified by applying Pearson Correlation Analysis (Hon & Tsz, 2015). Besides, it determines the positive or negative relationship between the constructs.

The value of r lies between -1 and +1 as stated by Hon and Tsz (2015). There are certain ways to interpret the r -value. If the r -value is exactly -1, it means there is a perfect negative linear relationship between the variables. When the r -value lies between 0.00 to 0.19, it shows that it is a very weak linear relationship between constructs, followed by r -value which lies within 0.20 to 0.39 is considered as a weak relationship between the variables. When the r -value lies on 0.40 to 0.59, it means that there is a moderate relationship. In addition, a strong relationship between the constructs is found when the r -value lies between 0.60 to 0.79, followed by r -value from 0.80 to 1.00 is indicated as very strong relationship between the constructs (Evans, 1996).

The strength of correlation is applied to both positive and negative relationship between the variables, and the only difference between both of them is the former is displayed with “+”, whereas the latter is indicated by “-”. It is also stated that the relationship between the constructs will be identified as significant when the p -value is less than 0.05 and hence null hypothesis will be rejected (Hon & Tsz, 2015).

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

This chapter describes the descriptive analysis, scale measurement and inferential analysis.

4.1 Descriptive Analysis

4.1.1 Demographic Profile of Respondents

This part demonstrates the respondents' profiles including gender, age, faculty, course, and questions related to online shopping experience of the respondents. The total respondents who participate in the research is 390.

Table 4.1.1: Survey Respondents by Gender, Age, Faculty and Foundation Program

Profile	Frequency	Percentage (%)
<u>Gender</u>		
Male	150	38.5
Female	240	61.5
<u>Age</u>		
18-20	169	43.3
21-23	190	48.7
24-26	30	7.7
27 or above	1	0.3
<u>Faculty or Foundation Program</u>		
Foundation in Arts	63	16.2
Foundation in Science	25	6.4
Faculty of Arts and Social Science	112	28.7
Faculty of Business and Finance	102	26.2
Faculty of Science	27	6.9
Faculty of Engineering and Green Technology	30	7.7
Faculty of Information and Communication Technology	31	7.9

Source: Developed for this research

Table 4.1.1 indicate the percentage of respondents' gender. The majority target respondents of this study are female which is 61.5%, however the male respondents are 38.5%. Besides, most of the respondents aged between 21 to 23 which is 48.7%, whereas there has only a single respondent (0.3%) is 27 years old or above. Based on the Table 4.1.1, it also indicates that majority of the respondents are from Faculty of Arts and Social Science with the percentage of 28.7%, whereas Foundation in Science has the least respondents which is 6.4% as compared with other faculties.

Table 4.1.1.1 Survey Respondents by Frequency, Duration, Estimated Expenditure of Online Shopping and Types of Items Purchases Online

	Frequency	Percentage (%)
<u>Number of times respondents bought things online</u>		
<u>(during the past six months)</u>		
Never	4	1.0
1-2 times	133	34.1
3-5 times	138	35.4
6-10 times	76	19.5
11-20 times	19	4.9
21 times or above	20	5.1
<u>Duration of respondents has been shopping online</u>		
Less than 3 months	94	24.1
3-6 months	81	20.8
6-12 months	62	15.9
1-2 years	53	13.6
2-3 years	39	10.0
3-5 years	41	10.5
More than 5 years	20	5.1
<u>The respondents' estimate amount of online shopping expenditure (during the past six months)</u>		
Less than RM 50	54	13.8
RM 50-RM100	121	31.0
RM100-RM300	130	33.3

RM300-RM500	50	12.8
RM500 above	35	9.0
<u>Types of Products Purchased Online</u>		
Majority: clothes and shoes	290	74.4
Minority: toys, music instrument, E-books, foods, mobile prepaid, luggage, water bottle and stationery	1	0.3

Source: Developed for this research

According to the Table 4.1.2, most of the respondents had purchased online 3 to 5 times during the past six months which is 35.4%, whereas there are only 4 respondents (1.0%) did not shop online during the past six months.

Besides, majority of the respondents have been shopping online less than 3 months, which is 24.1%, whereas there are only 20 respondents (5.1%) shop online more than 5 years.

In addition, the greatest number of respondents who had spent RM100 to RM300 in purchasing items online during the past six months is 130 respondents (33.3%). The least number of respondents who spent an estimated RM500 in online shopping during the past six months is 35 respondents (9.0%).

Furthermore, most of the respondents which is 290 respondents (74.4%) purchase clothes and shoes online. While toys, music instrument, E-books, foods, mobile prepaid, luggage, water bottle and stationery have the least number of respondents to purchase in which each of the item has only 1 respondent (0.3%) to purchase.

4.1.2 Central Tendencies Measurement of Constructs

Table 4.1.2: Central Tendencies Measurement of Constructs

Constructs	Items	Mean	Standard Deviation
Attitudes	A4	3.83	0.831
	A5	4.11	0.867
Perceived Risks	BII 3	4.00	0.939
	BIV 2	2.66	0.982

Perceived Benefits	CI 4	4.13	0.749
	CII 1	3.53	0.914
Subjective Norms	D 1	3.31	1.008
	D 2	3.98	0.803
Perceived Behavioural Control	E 1	3.78	1.016
	E 2	3.29	1.157
Intention	F 1	4.02	0.717
	F 2	4.02	0.729
	F 3	3.98	0.777
Online Shopping	G 1	3.48	0.961
Behaviour	G 2	3.05	1.043

Source: Created for this research

The Table 4.1.2 above illustrates the values of mean and standard deviation for all the items in questionnaire. Firstly, the mean values of attitude fall within 3.83 to 4.11, perceived risks from 2.66 to 4.00, perceived benefits from 3.53 to 4.13, subjective norms from 3.31 to 3.98, perceived behavioural control from 3.29 to 3.78, intention from 3.98 to 4.02, and online shopping behaviour from 3.05 to 3.48.

Basically, almost all the mean values of the constructs including attitude, perceived risks, perceived benefits, subjective norms, perceived behavioural control, intention and online shopping behaviour are all higher than 3.000. Thus, it shows that most of the respondents had expressed neutral opinions and agree with the items in the questionnaire except BI2 and BIV2 with the mean values of 2.94 and 2.66 respectively.

4.2 Scale Measurement

4.2.1 Normality Test

Table 4.2.1: Normality Test

Constructs	Items	Skewness	Kurtosis
Attitudes	A 1	-0.831	1.651
	A 2	-0.560	1.295
	A 4	-0.592	0.521
	A 5	-1.060	1.432
Perceived Risks	BII 3	-0.875	0.416
	BIII 2	-0.001	-0.849
	BIII 3	-0.869	0.640
	BIV 2	0.420	-0.240
Perceived Benefits	CI 2	-0.800	0.741
	CII 1	-0.525	0.076
	CIII 2	-0.890	0.712
Subjective Norms	D 1	-0.298	-0.590
	D 2	-0.947	1.679
Perceived Behavioural Control	E 1	-0.887	0.364
	E 2	-0.147	-0.990
Intention	F 1	-0.822	1.988
	F 3	-0.489	0.145
Online Shopping	G 2	0.034	-0.519
Behaviour	G 3	-0.413	-0.372

Source: Created for this research

The table displays the skewness and kurtosis values of all the constructs. A5 has the lowest skewness value which is -1.060, while BIV2 has the highest skewness value of 0.420 out of all the items in the questionnaire. Besides, E2 has achieved the lowest kurtosis value of -0.990 and F1 has achieved the highest kurtosis value which is 1.988 among all the items. According to (Garson, 2012), the items of constructs can be concluded as normally distributed when the values of the skewness and kurtosis lies between the range of -2 to 2. In this research, all the skewness values of the constructs are between -1.060 and 0.420, whereas the values of

kurtosis of the constructs are within -0.990 and 1.988. This indicates that all items are normally distributed due to all skewness and kurtosis values lies between the acceptable range of values.

4.3 Inferential Analysis

4.3.1 Pearson Correlation Analysis

Table 4.3.1: Pearson Correlation Coefficient

Variables	Perceived Risks	Perceived Benefits	Attitude	Subjective Norms	Perceived Behavioural Control	Intention	Behaviour
Perceived Risks	1.000						
Perceived Benefits	-0.089	1.000					
	0.080						
Attitude	-0.135	0.468	1.000				
	0.007	0.000					
Subjective Norms	0.073	0.260	0.231	1.000			
	0.149	0.000	0.000				
Perceived Behavioural Control	0.086	0.143	0.047	0.026	1.000		
	0.088	0.005	0.355	0.606			
Intention	-0.129	0.498	0.420	0.256	0.074	1.000	
	0.011	0.000	0.000	0.000	0.143		
Behaviour	-0.257	0.396	0.405	0.130	-0.008	0.448	1.000
	0.000	0.000	0.000	0.010	0.870	0.000	

Source: Developed for this research

Correlation Coefficient (r-value)

Significance (P-value)

The Table 4.4.1 shows the findings of Pearson Correlation analysis. Perceived risks (-0.135) has negative correlation with attitude, whereas perceived benefits (0.468) is positively correlated with attitude. It means that the level of the majority variables will decrease when the level of perceived risks increase. Both of the perceived risks and perceived benefits have significance relationship with attitude as the P values for perceived risks and perceived benefits are less than 0.05 which are 0.007 and 0.000 respectively. Besides, attitude and subjective norms have positive correlation with online shopping behavior as their correlation coefficient are 0.405 and 0.130 respectively, whereas perceived behavioural control has negative correlation with online shopping behavior as its correlation coefficient is -0.008. In addition, attitude and subjective norms have significant relationship with behavior as the P values of attitude and subjective norms are 0.000 and 0.010. While perceived behavioural control has insignificant relationship (0.870) with online shopping behavior as its P value is greater than 0.05.

Additionally, perceived behavioural control has achieved the highest number of P value with behavior which is 0.870. Besides, the p value of perceived behavioural control and intention is 0.143. Thus, it shows that there is no significant relationship between perceived behavioural control and intention and behaviour. Whereas, the P-values of perceived risks and others two variables which are perceived benefits ($p=0.080$) and subjective norms ($p=0.088$) are greater than 0.05 too. This signifies that there is no significance relationship.

Lastly, the highest correlation coefficient shown in the table above is 0.498 which is lesser than 0.9. Hence, the results evidenced that there are no multicollinearity problems exists among the variables.

CHAPTER 5: DISCUSSION, IMPLICATIONS AND CONCLUSION

5.0 Introduction

This chapter discusses the summary of statistical analysis, discussion on major findings, implications of the study, limitations of the study, recommendations for future study and conclusion.

5.1 Summary of Statistical Analysis

5.1.1 Summary of Descriptive Analysis

The total of 390 sets questionnaire had been distributed to the respondents for collecting data purpose. Based on the findings in Chapter 4, majority respondents are female (61.5%) as compared with the male respondents (38.5%). Most of them aged between 21 to 23 years old (48.7%). Besides, there are 28.7% of the respondents are from Faculty of Arts and Social Science (FAS).

The highest number of times that respondents bought things online during the past six months are 3 to 5 times (35.4%). The result also indicates that most of the respondents (24.1%) do online shopping less than 3 months. Furthermore, 33.3% of the respondents spend at least RM100 to RM300 in online shopping during the past six month. The findings of the research also show that 74.4% of respondents buy clothes and shoes online.

The lowest mean value of all the independent variables is 2.66 and the highest mean value are 4.13. The lowest mean value for dependent variable are 2.66 and the highest mean value are 4.11. Thus, it signifies that majority of respondents had expressed neutral to agree opinions with the items in the questionnaire.

5.1.2 Summary of Scale Measurements

Reliability test and normality test were carried out for this study to determine the consistency of the results and to ensure the data distribution is normal. The results of the reliability test indicate that all the variables including independent and dependent variables are reliable and consistency as the coefficient range of Cronbach's alpha for

all the constructs are above 0.7. According to the Rule of Thumb for reliability test, all the constructs achieve excellent reliability in which the Cronbach's Alpha Coefficient range is 0.8 or above, except Perceived Risks, Subjective Norms and Perceived Behavioural Control which are under good reliability in which their Cronbach's Alpha values are within 0.7 to 0.8 (Sekaran & Bougie, 2013).

Moreover, the results of normality test also show that data of all the constructs are normally distributed as all the values of skewness and kurtosis met the range of -2 to 2 (Garson, 2012).

5.1.3 Summary of Inferential Analysis

The strength of relationship between two constructs is described in the Pearson Correlation Analysis. It shows that Perceived Risks is negatively correlated with majority of the variables excluding with Subjective Norms and Perceived Behavioural Control. While majority of the variables are positively correlated with each other, except Perceived Behavioural Control with Behaviour. Besides, there are significant correlation for most of the variables as their p-values are less than 0.05, except Perceived Risks with Perceived Benefits, Perceived Risks with Subjective Norms, Perceived Risks with Perceived Behavioural Control, Attitudes with Perceived Behavioural Control, Subjective Norms with Perceived Behavioural Control, Perceived Behavioural Control with Intention and Perceived Behavioural Control with behaviour (Malhotra, 2010). Attitudes has a moderate correlation; Subjective Norms has a very weak correlation; Perceived Behavioural Control has negative correlation with Online Shopping Behaviour of students in UTAR (DV) respectively. Whereas Perceived Risks has negative correlation and Perceived Benefits has a moderate correlation with DV. Additionally, the correlation coefficient of all the variables is below 0.90, therefore it can be concluded that the problem of multicollinearity problem does not exists (Hair, Anderson, Babin & Black, 2014).

5.2 Discussion on Major Findings

5.2.1 Attitudes

The first research objective is to determine whether attitudes influence the online shopping behaviour of students in UTAR, Kampar campus.

The purpose of Pearson Correlation test is to identify the relationship between attitude and behaviour towards online shopping. The results of the data analysis are shown in the Table 4.3.1. The p-value which is 0.000 that less than 0.05 indicates that there is significant relationship between attitude and intention. Moreover, the findings show that attitude is positively related to intention as the r-value is 0.420. Furthermore, there is also significant positive relationship between attitude and behaviour with the p-value of 0.000 and r-value of 0.405. Moreover, the findings show that the r-value between attitude and intention is the highest value among others variables. It also showed that there are highest value of r-value for behaviour among others variables.

It is aligned with the previous study of Choi & Geistfeld (2007) and Truong (2009) which confirm that the attitude of the consumers is the strongest predictors of intention and behaviour for them to online purchase. This shows that the attitude impacts on intention and behaviour to online shopping among students in UTAR, Perak campus. The results show that attitude is important to predict online shopping intention and behaviour. The results are aligned with the consumer behaviour study by Hansen (2008) and Ajzen (1991), both hedonistic and utilitarian attitudes towards Online Shopping Grocery is the strong predictors for intention which in turn will affect consumer buying behaviour. It aligns with the research of Delafooz (2009) that the level of intention and behaviour are high when attitude towards online shopping is positive among the postgraduate students which is in Malaysia. Moreover, the results are also proved by the research of Jarvenpaa et al. (2000) that the intention or willingness of online shoppers are relatively positively high with the attitude which in turn will influence their buying decision making and behavioural. It also aligned with the results of the research of George (2004) and Yang et al. (2007) that attitude is the predictor that will significantly and positively influence the intention for online shopping. Moreover, the research of Shwu-Ing (2003) shows that positive attitude will directly influence online shopping intention which in turn proving the findings of this research. Besides, the research of Ho (2013) had proved the role of attitude as the intention and behaviour on online shopper are predicted by attitude. It is also aligned with the study

of Javadi et al. (2012) that if the individual has significant and positive relationship, it will positively increase their intention and behaviour towards online shopping.

As conclusion, the findings of this study are aligned with the past studies that there is a significant positive relationship between attitude and behaviour towards online shopping. It is also been proven by the previous studies of Shwu-Ing (2003), Jarvenpaa et al. (2000), Delafrooz & Narger (2009), Tsydybey (2014) and Ho (2013) that the higher the attitude towards online shopping, the higher the intention which in turn will directly influence the online shopping behaviour of consumers. The findings had shown that attitude is significantly positive related and influence the online shopping behaviour.

5.2.2 Subjective Norms

This research intends to determine whether subjective norms influence the online shopping behaviour of students in UTAR, Perak campus.

The results of the data analysis are shown in the Table 4.3.1. It shows that there is a significant relationship between subjective norms and intention with the p-value of 0.000 and r-value of 0.256. There is weak significant positive relationship between subjective norms and behaviour with the r-value of 0.130 and p-value of 0.010.

The finding is aligned with the previous study of Javadi et al. (2012) that intention of the consumers will be influenced by the opinions of the family and friends. Besides, the study by Ajzen (1991) and Orapin (2009) indicates that the intention of consumers to purchase online will be influenced by the opinions from the people whom important to them and it proves that subjective norms are significantly positively related to intention. Besides, the study by Khalifa & Limayen (2003) and Jarvelainen (2007) prove that the intention and behaviour of online shoppers are determined by subjective norms which refer to their family, friends and media. It is synchronized with the study of Lim et al. (2015), Harn, Khatibi & Ismail (2006) and Jamil & Mat (2011) that were conducted in Malaysian students' context. It signifies that the perception of people of importance like family and friends positively affect the students' intention towards online shopping and influence their buying behaviour.

The findings indicate that the significant relationship between subjective norms and behaviour is weaker than the relationship between subjective norms and intention. This

finding is aligned with the study of Jamil and Mat (2011) in which the subjective norms have minor influence on people's online shopping behaviour, but major influence on their intention towards online shopping. It is synchronized with the research of Choo, Chung & Pysarchik (2004), Limayen et al. (2000) and Zhou (2011) that the subjective norms will firstly influence the online shopper intention and then influence their behaviour. Moreover, it is also supported by the research of He et al. (2008) that the subjective norms significantly affect consumers' intention, but it is weaker in affecting their behaviour. It is also proven by the study of Lim, et al (2015) that there is no direct and weak relationship between subjective norms and intention as the subjective norms first influence their intention rather than behaviour.

Hence, the findings state that the significant relationship between subjective norms and intention is stronger than the significant relationship between subjective norms and behaviour. It is proven by the past studies of Jamil & Mat (2011), Leeraphong & Mardjo (2013), Siti, Mohammed & Kamariah (2012) and Xie, Zhu, Lu & Xu (2011) that subjective norms will more likely to influence the consumers' intention, while less likely to influence their behaviour.

5.2.3 Perceived Behavioural Control

To determine whether perceived behavioural control influence the online shopping behaviour of students in UTAR, Perak campus is the third research objective in this study.

The relationship between attitude and behaviour towards online shopping is examined by the Pearson correlation Test. The results of the data analysis is illustrated in the Table 4.3.1. It shows that there is no significant relationship between perceived behavioural control and intention because the p-value is 0.143 which is greater than 0.05. Besides, the p-value which is 0.870 is the highest among all the variables, it signifies that there is no significant relationship between perceived behavioural control and behavioural. Moreover, the r-value of 0.074 indicated that there is very weak positive relationship between perceived behavioural control and intention. This confirms that perceived behavioural control has positive correlation with intention, however it has no significant relationship between them as the significant value is lower than 0.05. Furthermore, it is also a weak negative relationship between perceived behavioural control and behaviour that the r-value is only

-0.008. Thus, it can be concluded that perceived behavioural control is not a strong predictor for online shopping behaviour.

It is contrary with the past research of Khalifa & Limayem (2003) that the perceived behavioral control is significantly related to actual online purchasing. According to Ajzen (1991), perceived behavioural control and behavioural intention are the influential factors on consumer behaviour (Ajzen, 1991). This is because the findings have indicate that no any significant relationship is found between these constructs. Moreover, the relationship between these variables is weak.

However, the results is synchronized with the results of Mohammad et al. (2012) that the perceived behavioral control is not significantly related to online shopping behaviour. Moreover, it is also consistent with the research from Sinha (2010) that the influence of perceived behavioural control is not significant towards online purchasing behaviour. One of the possible reasons is because the limited accessibility to computer and Internet do not really affect the consumers' intention for online shopping. This is due to nowadays the usage of smartphone is greater and heavier than the usage of computers. The smartphone ownership rates increased in the lighting speed in the worldwide which 21% of ownership rates in year 2013 and it had been climbing to 37% in year 2015 (Jacob, 2016). Besides, the research shows that the rate of smartphone ownership has been increased rapidly since year 2013 and there are increasing rate of 34% in Malaysia (Jacob, 2016). Even though there is limited accessibility to computer, it will not affect the respondents to have the desire to continue shopping online.

While according to the past research from Sinha & Kim (2012), it stated that the accessibility to the Internet is one of the elements of perceived behavioural control that may affect online shopping behaviour. Although they do not have computer with Internet connection, the consumers will not restricted to online shopping as they may use their smartphones and connect to Internet or smartphone data. Based on the January data in year 2018, there are total amounted of 3.7 billion unique mobile users among the population of global mobile (Statista, 2018). Moreover, there is 49.7% of web page views through mobile devices in the worldwide in February 2017 (Statista, 2018). This shows that people nowadays own a smartphone and they are heavy users. Hence, the respondents are still able to find easily to shop online with the existence of smartphone.

Hence, even though there is no significant relationship between perceived behavioural control and online shopping behaviour, but it is still aligned with others past research with certain possible reason.

5.2.4 Perceived Risks

The fourth research objective in this research is to determine whether perceived risks influence the attitude of online shopping of students in UTAR, Kampar campus.

The relationship between perceived risks and attitude towards online shopping is examined by the Pearson Correlation Test. The results of the data analysis is shown in the Table 4.3.1. There is significant relationship between perceived risks and attitude as the p-value is 0.007 which is lower than 0.05. Moreover, r-value of -0.135 illustrates that there is a negative relationship between perceived risks and attitude. It indicates that attitude will decrease when the perceived risks increase.

The finding is aligned with a few of the past empirical studies that concluded that perceived risks is the important influential factors in online shopping Suki (2002) and Egelin, Joseph and Johnson (2012). The findings of the research of Dai, Forsythe and Kwon (2014) also proved that online shopping attitude is negatively related to perceived risks, and attitude will influence people's online shopping intention and actual buying behaviour. The study of Leboo (2015) also found that there is a negative relationship between attitude and perceived risks. There are several research from Drennan et al. (2006), Kuhlmeier & Knight (2005) and Slyke, Belanger & Comunale (2014) also generate the same findings. The research by Tan (1999) showed that the lower the perceived risks associated with online purchasing, the higher the willingness and attitude of consumers towards online shopping. Lastly, the research by Bhatnagar et al. (2000) concludes that the higher the uncertainty during the online purchasing, the higher the perceived risks which will decrease the favourable attitude towards online shopping. The findings of the research which was done by Cox and Rich (1964) and Peterson et al (1997) proved that the greater the perceived risks, the greater the possibilities for the consumers will prefer the brick and mortar retailer rather than online shopping which will decrease the favourable attitude towards online shopping .

Hence, the findings of this research is synchronized with the findings of majority of the past studies, while the significant negative relationship between perceived risks and attitude has been proven with the r-value of -0.135 and p-value of 0.007.

5.2.5 Perceived Benefits

The fifth research objective in this study is to determine whether perceived benefits influence the attitude of online shopping of students in UTAR, Kampar campus.

The relationship between perceived benefits and attitude towards online shopping was examined by Pearson Correlation test. The results of the data analysis is displayed in the Table 4.3.1. The p-value of 0.000 and r-value of 0.468 indicate that there is a significant positive relationship between perceived benefits and attitude. This explains that perceived benefits will influence the attitude of respondents towards online shopping.

The findings is aligned with previous study of Kurnia and Jenny (2003) which state that attitude towards online shopping will be positively affected by the perceived benefits. The study of Chen, Hsu and Lin (2010) also prove that perceived risk is one of the main reasons that drive the online shopper when purchasing online. Besides, the study of Soopramanien and Robertson (2007) had proven that level of attitude of online shopping will be high if the consumers perceived online shopping is benefits for them. It also aligned with the results of Delafrooz et al. (2009) that attitude towards online shopping among university students in Malaysia is significantly and highly related with perceived benefits. The findings of Vijayasathy and Jones (2000) confirmed that benefits of internet shopping is significantly associated with attitude and intention towards online shopping. The study of Forsythe et al (2002) proves the significant and positive relationship between perceived benefits and frequency and amount that spent online which indicate the attitude towards Internet shopping. Moreover, the findings of Shaheen Mansori et al. (2012) shows that perceived benefits is one of the factor that significantly influence the attitude of online shopping among generation X and Y. Furthermore, a study that was conducted in Pakistan by Adman (2014) had determined that the perceived benefits will cause positive impact on attitude and buying behaviour of consumers towards online shopping. Lastly, the study conducted by Ngugi (2014) had stated that the perceived benefits like time saving, convenience and others more will positively affected the attitude of online shopper which in turn influence their buying behaviour.

In conclusion, the findings is aligned with many previous studies that there is significant positive relationship between perceived benefits and attitude towards online shopping.

5.3 Implications of the Study

5.3.1 Managerial Implications

According to the descriptive analysis, majority of the respondents in this research are female. It is consistent with the statement stating that most of the universities students in Malaysia are female compared with male students (Rajaendram, 2016). Besides, majority of the respondents in this study aged 21 to 23 years old because of UTAR offers more degree programs and generally students who pursue their degree are mostly between 19 to 24 years old (A Glance at the Malaysian Education System, 2015).

Nevertheless, perceived risks is significantly and negatively related to the online shopping behaviour of the students. Hence, the online retailers can implement some risk reduction strategies in order to reduce the concerns of UTAR students and build their confidence when purchasing online such as security risks and non-delivery risks. For instance, providing students with security and purchase privacy to build their confidence and trust on online shopping (The Shopping Guarantee, 2017). Besides, online retailers should educate the students with awareness of the e-commerce laws in Malaysia on the online shopping platforms. The applicable laws include Consumer Protection Act 1999, Personal Data Protection Act 2010, Electronic Commerce Act 2006, and Computer Crimes Act 1997 (Ruxyn, 2017). Moreover, Malaysia government is also an important authority to enforce more rules and regulations in order to protect the online shoppers.

Next, perceived benefits are significantly and positively related to online shopping behaviour of the students according to the findings. When the e-marketers implement risk reduction strategies, it also will indirectly increase the confidence of UTAR student's confidence in online shopping and encourage more online purchases. E-marketers can provide cheaper prices, discounts, or promotions for online shoppers to enjoy the benefits when purchasing online.

Perceived risks and perceived benefits will affect the online shopping behaviour of UTAR students. When they perceive the risks in online shopping are low and the

benefits are high, it definitely will increase their favourable attitudes toward online shopping.

In addition, subjective norms are found to have a significant relationship with behaviour in this study. The referent opinion (friends and family) towards online shopping behaviour will become favourable as online shopping is a very common phenomenon in this digital era. Therefore, it encourages the students to engage in online shopping when people important to them show a favourable views toward purchasing online. This can be consider as very crucial for the online retailers to influence the perceptions of the referent opinion of the UTAR students.

Lastly, perceived behavioural control is found to have an insignificant relationship with online shopping behaviour of students. This is based on the UTAR students' perception on the aspects of accessibility to technology and Internet with the online shopping behaviour. In this era of modern technology, it is very common for an individual to have a smartphone with data and WIFI in order to access to the internet easily especially university students. Due to most of the university students are tech savvy (Bowden, 2016) Hence, online retailers can focus lesser on the accessibility to the Internet since the Perceived Behavioural Control has no significant relationship with online shopping behaviour of students is insignificant based on the results of Pearson Correlation Test.

5.3.2 Theoretical Implications

This research had effectively determined the factors that influence the online shopping behaviour of students in UTAR, Kampar campus from the theoretical perspective by applying Theory of Planned Behaviour (TPB) with two additional constructs. TPB is the most applicable model in explaining the human behaviour (Ajzen, 1991). According to the research results, it indicate that partial of TPB is appropriate by adding Perceived Risks and Perceived Benefits as the additional variables for this study. Both of the variables have a significant relationship and direct linkage with Attitude which is the one of the independent variables of TPB. It is proven that the proposed model for this research is able to develop a comprehensive understanding and enrich the knowledge of the factors that influence online shopping behaviour of the target respondents. It delivers a clearer picture of the theory and provides a deeper and detailed understanding for the topic. Thus, this study can be the references to the future researchers who are

going to carry out the research on similar topic as this proposed framework is more explanatory.

5.4 Limitations of the Study

There are a few of limitations that need to be addressed in this research. First and foremost, this research is limited by the usage of closed-ended questions in the questionnaire of this study. This is because the questions' format may cause the respondents to be limited from providing their real opinions as stated by (Mathers, Fox & Hunn, 2009). Closed-ended questions refer to the questions consisting of limited possible answers (Farrell, 2016). The respondents can only answer this type of questions with two point questions (Yes or No), multiple choice questions (A, B, C, D) or rating scales such as five point Likert scales (Sincero, 2012). Respondents are only allowed to choose their answers based on the options given in the questions only. As a result, the data collected may be not accurate enough as the respondents are unable to provide their own answers and the researchers unable to explore more about the opinions of the respondents.

Besides, the second limitation of this research is the usage of cross-sectional approach owing to time constrain. Cross-sectional study refers to a study which investigates a situation at a certain time point and there is no follow up (Saunders, Lewis & Thornhills, 2009). As a result, it may fail to reflect the respondents' opinions or views regarding the factors influencing their online shopping behaviour in the future due to there may be some changes in their opinions and perceptions since people are changing from time to time.

Moreover, data collection method adopted of this study may cause the data obtained to be biased and inaccurate. The research instrument of this research is self-administered questionnaire, it is convenient and low costs. However, respondents may answer the questions in the questionnaire superficially without interpreting and analysing carefully when they are overloaded by works or they are annoyed with the great amount of the items in the questionnaire, thus it will discourage them to fill up the questionnaire truthfully. Additionally, the respondents may also try to guess the answers that they think the researchers wanted. Therefore, the data collected will be inaccurate and threatened by response bias, and eventually decrease the quality of the study.

5.5 Recommendations for Future Study

There are some recommendations for future researchers in order to improve the limitations identified in this research. Firstly, open-ended questions are recommended to be used by future researchers in the questionnaire of the study in order to obtain more accurate results because respondents are able to express their real opinions freely. Future researchers are also suggested that to replace the self-administered questionnaire with face-to-face interview in order to gain a better insights and more in depth understanding about the factors that will influence the respondents to shop online (Marshall, 2016). This is because face-to-face interview allows the researchers to communicate directly with the respondents and avoid the respondents from providing answers randomly. Additionally, researchers can obtain a more detailed assessment as they can observe the non-verbal language of the respondents and probe more information from respondents (Marshall, 2016). Hence, replacing self-administered questionnaire with face-to-face interviews can strengthen the accuracy and reliability of the findings.

Secondly, future researchers should use longitudinal study approach in conducting the research. This is due to longitudinal study approach may enable researchers to study the changes in the online shopping behaviour of the respondents over time (Cherry, 2017). Researchers can determine the human changes over time more effectively. The research is permitted to be carried out thoroughly and the accurateness and reliability of the results will be increased by applying longitudinal approach. Longitudinal study is used to study a phenomenon over a certain period of time that allows the researchers to recognise the individual changes. Therefore, researchers can collect more concise and accurate data for this study.

In addition, future researchers should also reduce the items in the questionnaire. This is because majority of respondents may not read the questions carefully, disinterested to fill up the questionnaire and tend to answer the questionnaire superficially as they may get annoyed by the great number of items in the questionnaire which consists of 52 questions in total. Thus, it is considered as lengthy. Hence, future researchers should consider to reduce the items in the questionnaire.

5.6 Conclusion

This research provided a new insights into the development of TPB with additional constructs to study the online shopping behaviour of UTAR students, Kampar campus. The research objectives and research questions which intended to determine about how those factors influence the online shopping behaviour of university students are successfully achieved. Purposive sampling had been used by distributing survey questionnaires to the target respondents who have at least one experience of online shopping. As a result, it showed that most of the independent variables including attitudes, subjective norms, perceived risks and perceived benefits will influence the online shopping behaviour of students in UTAR. Although there are no significant relationship between perceived behavioural control and online shopping behaviour of the respondents, nevertheless this study has found out there are some of the implications successfully which can fulfil the significance of this study for instance it benefit to the online shopping retailers and marketers in improving and implementing their e-commerce marketing strategies and plans among the society. However, this study has found some limitations such as the usage of closed-ended questions in the questionnaire, cross-sectional approach owing to time constrain and data collection method adopted may cause biased and inaccurate. The future researchers are suggested to use open-ended questions in the questionnaire, longitudinal study approach, conduct face-to-face interview and reduce the number of items in the questionnaire.

References

- A Glance at the Malaysian Education System. (2015, March 16). Retrieved from, <https://www.studymalaysia.com/education/higher-education-in-malaysia/a-glance-at-the-malaysian-education-system>
- Abandonment Rate – Glossary. (n.d.). Retrieved from <https://www.bluefountainmedia.com/glossary/abandonment-rate/>
- Adnan, H. (2014). An analysis of the factors affecting online purchasing behavior of Pakistani consumers. *International Journal of Marketing Studies*, 6(5), 133–148.
- Advantages and disadvantages of online transaction processing systems. (n.d.). Retrieved from <http://www.onlinecmag.com/advantages-disadvantages-online-transaction-processing-systems/>
- Ahmad, N., Omar, A., & Ramayah, T. (2010). Consumer lifestyles and online shopping continuance intention. *Business Strategy Series*, 11(4), 227-243.
- Ajzen, I. (1991). Organizational behaviour and human decision processes. *University of Massachusetts at Amherst*, 50, 179-211.
- Ambad, S.N.A., Kalimin, K.M. & Yusof, K.M.A.A.K. (2017). The effect of internet addiction on student's emotional and academic performance. *Academia Journal*, 6(1), 86-98.
- An Overview of the Education Structure in Malaysia (n.d.). Malaysiaeducation.info. Retrieved from <http://www.malaysiaeducation.info/Education-System/education-structure-in-malaysia.html>
- Araim, M., Campbell, M.J., Cooper, C.L. & Lancaster, G.A. (2010). What is a pilot or feasibility study? A review of current practice and editorial policy. *BMC Medical Research Methodology*, 10(67), 1-7.
- Asiamah, N., Mensah, H. K., & Oteng-Abayie, E. (2017). General, target, and accessible population: Demystifying the concepts for effective sampling. *The Qualitative Report*, 22(6), 1607-1621.
- Baikir, H. E. H., Ali, A. B., & Wahab, M. M. A. (n.d.). Research methodology step by step guide for graduate students. *Sudanese Journal of Paediatricians*, 9, 9-22.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37,122-147.
- Bandura, A. (1991). Social-cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50.
- Batra, R., & Ahtola, O. T. (1991). Measuring the hedonic and utilitarian sources of consumer attitudes. *Marketing letters*, 2(2), 159-170.
- Bellman, Steven, Lohse, Gerald L. Johnson, & Eric J. (1999). Predictors of online buying behavior. *Communications of the ACM*, 42 (12), 32-38.
- Bhatnagar, A., Misra, S., & Rao, H. R. (2000). On Risk, Convenience and Internet Shopping Behavior. *Communications of the ACM*, 48(2), 98-105.
- Biswas, D., & Biswas, A. (2004). Perceived risks in online shopping: Do signals matter more on the web? *Journal of Interactive Marketing*, 18(3), 30-45.

- Bloch, P. H., & Bruce, G. D. (1984). The leisure experience and consumer products: An investigation of underlying satisfactions. *Journal of Leisure Research*, 16(1), 74-88.
- Bolton, R. N., Parasuraman, A., Hoefnagels, A., Migchels, N., Kabadayi, S., Gruber, T., Loureiro, Y. K., & Solnet, D. (2013). Understanding generation Y and their use of social media: a review and research agenda. *Journal of Service Management*, 24(3), 245-267.
- Bonn, G., & Tam, C. L. (2016). Imagining a good life in Malaysia and China: cultural beliefs among mainland Chinese, Malaysian Chinese, and Malay University students. *Asian Journal of Social Psychology*, 19(2), 145-153.
- Bowden, O. (2016). Canadian universities struggling to offer digital learning to tech-savvy Generation Z. Retrieved from <http://business.financialpost.com/executive/smart-shift/canadian-universities-struggling-to-offer-digital-learning-to-tech-savvy-generation-z/wcm/2d440ec8-38af-4518-8095-e9b2a33ac79d>
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40.
- Button, M., Nicholls, C.M., Kerr, J., & Owen, R. (2014). Online frauds: learning from victims why they fall for these scams: *Journal of Criminology*, 47(3), 391–400.
- Chang, H. H., & Chen, S. W. (2008). The impact of online store environment cues on purchase intention. *Online Information Review*, 32(6), 818-841.
- Cheema, A., & Papatla, P. (2010). Relative importance of online versus offline information for Internet purchases: product category and internet experience effects. *Journal of Business Research*, 63(9-10), 979-985.
- Chen, J. H., Xie, X. Y., & Jing, F. X. (2011). The security of shopping online. *International Conference on Electronic & Mechanical Engineering and Information Technology*, 4693-4696.
- Chen, Y. H., Hsu, I. C., & Lin, C. C. (2010). Website attributes that increase consumer purchase intention: A conjoint analysis. *Journal of Business Research*, 63(9-10), 1007–1014.
- Cherry, K. (2017). The pros and cons of longitudinal research. Retrieved from <https://www.verywellmind.com/what-is-longitudinal-research-2795335>
- Cherry, K. (2017). What is a cross-sectional study? The advantages and challenges of cross-sectional studies. Retrieved from <https://www.verywell.com/what-is-a-cross-sectional-study-2794978>
- Chiu, C., Hsu, M., Lai, H., & Chang, C. (2012). Re-examining the influence of trust on online repeat purchase intention: The moderating role of habit and its antecedents. *Decision Support Systems*, 53(4), 835-845. doi:10.1016/j.dss.2012.05.021
- Choi, J., & Geistfeld, L. V. (2004). A cross-cultural investigation of consumer e-shopping adoption. *Journal of Economic Psychology*, 25(6), 821-838.
- Choo, H., Chung, J.-E., Pysarchik, D. T., (2004). Antecedents to new food product purchasing behaviour among innovator groups in India. *European Journal of Marketing*, 38(5/6), 608 - 625.

- Chuklin, A., & Serdyukov, P. (2012). Potential good abandonment prediction. *Proceedings of the 21st international conference companion on World Wide Web - WWW 12 Companion*. doi:10.1145/2187980.2188089
- Chun, S., Cho, W., & Subramanyam, R. (2016). Transaction security investments in online marketplaces: An analytical examination of financial liabilities. *Decision Support Systems*, (92), 91-102.
- Clemes, M. D., Gan, C., & Zhang, J. (2014). An empirical analysis of online shopping adoption in Beijing, China. *Journal of Retailing and Consumer Services*, 21(3), 364-375.
- Close, A.G., Kukar-Kinney, M. (2010). Beyond buying: motivations behind consumers' online shopping cart use. *Journal of Business Research*, 63, 986-992.
- Country Commerce. Malaysia. (2005). *The Economist Intelligence Unit Limited*. 103-109.
- Cox, D. F., & Rich, S. J. (1964). Perceived risk and consumer decision – making: the case of telephone shopping. *Journal of Marketing Research*, 1(4), 32-39.
- CyberSecurity Malaysia, media release. (2014, September 10). Retrieved from http://www.cybersecurity.my/data/content_files/44/1309. Pdf
- Dagar, A. (2014). Online banking: benefits and related issues. *IRACST – International Journal of Commerce, Business and Management*, 3(5), 715-719.
- Dai, B., Forsythe, S., & Kwon, W. S. (2014). Impact of online shopping experience on risk perceptions and online purchase intentions: does product category matter? *Journal of Electronic Commerce Research*, 15(1), 13-24.
- Degree options in Malaysia. (n.d.). Retrieved from <https://www.universityguideonline.org/en/InternationalPathways/degree-options-in-Malaysia>
- Delafronz, N. (2009). Factors affecting students' online shopping attitude and purchase intention. PhD thesis, *Universiti Putra Malaysia*. Retrieved from, http://psasir.upm.edu.my/5673/1/FEM_2009_3.pdf.
- Delafronz, Narges, Laily, H., Paim, Sharifah, A. H., Samsinar, M., Sidin & Khatibi, A. (2009). Factors affecting students' online shopping attitude and purchase intention. PhD thesis, *Universiti Putra Malaysia*. Retrieved from, http://academicjournals.org/article/article1380535988_Delafronz%20et%20al.pdf
- Don't get scammed by a fake online store. (2017, March 20). *Australian Competition and Consumer Commission*. Retrieved from <https://www.scamwatch.gov.au/news>
- Driscoll, D.L. (2011). Introduction to primary research: Observations, surveys, and interviews. Retrieved from <https://wac.colostate.edu/books/writingspaces2/driscoll--introduction-to-primary-research.pdf>
- Ecommerce Highlights Malaysia. (n.d.). The Statistics Portal. Retrieved from <https://www.statista.com/outlook/243/122/ecommerce/malaysia#>
- Egeln, L. S., Joseph, J. A., & Johnson, L. S. (2012). Shopping cart abandonment in online shopping. *Atlantic Marketing Journal*, 1(1), 1-14.

- Esal, A. & Kannapiran, S. (2014). Perception of male and female students towards higher education in technical and vocational study. *Journal of Education and Human Development*, 3(2), 913-923.
- Etikan, I., Musa, S. A. & Alkassim, R.S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4.
- Evans, J. D. (1996). *Straightforward statistics for the behavioral sciences*. Pacific Grove, CA: Brooks/Cole Publishing.
- Export.gov. (n.d.). Retrieved from <https://www.export.gov/apex/article2?id=Malaysia-E-Commerce>
- Farrell. S. (2016). Open-ended vs. closed-ended questions in user research. Retrieved from <https://www.nngroup.com/articles/open-ended-questions/>
- Featherman, M. S., Miyazaki, A. D., & Sprott, D. E. (2010). Reducing online privacy risk to facilitate e-service adoption: The influence of perceived ease of use and corporate credibility. *Journal of Services Marketing*, 24(3), 219-229.
- Fong, H.S. (2013). *A study on consumers' attitude towards online shopping on Penang famous fruit pickles*. Faculty of Applied Social Sciences Open University Malaysia.
- Forsythe, S. M., & Shi, B. (2003). Consumer patronage and risk perceptions in internet shopping. *Journal of Business Research*, 56(11), 867-875.
- Forsythe, S., Petee T, & Kim, J.O. (2002). Modeling consumer behavior in on-line environments: Scale Development: National Textile Center. Annual Report. Retrieved from, <http://www.ntcresearch.org/pdf-rpts/AnRp05/S02-AC23-A5.pdf>.
- Fouka, G. & Mantzorou, M. (2011). What are the major ethical issues in conducting research? Is there a conflict between the research ethics and the nature of nursing? *Health Science Journal*, 5 (1), 3-14.
- Franco, E. C., & Regi, B. (2016). Advantages and challenges of E-commerce customers and businesses: In Indian perspective. *International Journal of Research-Granthaalayah*, 4(3), 7-13.
- Free Internet Security. (n.d.). Retrieved from <http://www.securitysupervisor.com/security-qa/online-security/263-what-is-scam>
- Garson, G. D. (2012). *Testing statistical assumptions (12th ed.)*. Asheboro, US: Statistical Associates Publishing.
- Gelo, O., Braakmann, D., & Benetka, G. (2008). Quantitative and qualitative Research: Beyond the debate. *Integr Psych Behav*, 42, 266-290.
- George A. Johanson, G.A. & Brooks, G.P. (2010). Initial scale development: sample size for pilot studies. *Educational and Psychological Measurement*, 70(3), 394-400.
- George, J. F. (2004). The theory of planned behavior and internet purchasing. *Journal of Internet Research*, 14(3), 198-212.
- Goldstein, H.,Lynn, P., Muniz-Terrera,G., Hardy, R., O'Muircheartaigh,C., Skinner, C.,& Lehtonen, R. (2015). Population sampling in longitudinal surveys. *Longitudinal and Life Course Studies*, 6 (4), 447-475.

- Gotland, H. O. (2011). Consumers' attitude towards online shopping: factors influencing Gotland consumers to shop online. Retrieved from <https://uu.diva-portal.org/smash/get/diva2:420724/FULLTEXT01.pdf>
- Grandón, E. E., Nasco, S. A., & Mykytyn, P. P. (2011). Comparing theories to explain commerce adoption. *Journal of Business Research*, 64(3), 292-298.
- Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2014). *Multivariate data analysis* (7th ed.). Harlow, UK: Pearson Education Limited.
- Hansen, T. (2008). Consumer values, the theory of planned behaviour and online grocery shopping. *International Journal of Consumer Studies*, 32(2), 128-137.
- Harn, A. C., Khatibi, A., & Ismail, H., (2006). E-Commerce: A study on online shopping in Malaysia. *Journal of Social Science*, 13(3), 231-242.
- Hasan, H. H., & Rahim, S. A. (2008). Factors affecting online purchasing behavior. *Jurnal Komunikasi. Malaysian Journal of Communication*, 24, 1-19. Retrieved from <http://ejournals.ukm.my/mjc/article/view/15122/4726>
- Hausman, A. V., & Siekpe, J. S. (2009). The effect of web interface features on consumer online purchase intentions. *Journal of Business Research*, 62(1), 5-13.
- He, D., Lu, Y., & Zhou, D. (2008). Empirical study of consumers' purchase intentions in C2C electronic commerce. 13(3), 287-292.
- Heale, R. & Twycross, A. (2015). Validity and reliability in quantitative research. *Evid Based Nurs*, 18(3), 66-67.
- Health Communication Capacity Collaborative. (n.d.). What is the theory of planned behavior? *An HC3 Research Primer*. Retrieved from https://www.healthcommcapacity.org/wp-content/uploads/2014/03/theory_of_planned_behavior.pdf
- Helvaci, M. A. (2015). Schools' readiness towards change. *The Anthropologist*, 19(3), 723-734.
- Hicks, B. (2016, July 27). APAC e-commerce transaction abandonment rate is the world's highest – and rising. *Mumbrella Asia*. Retrieved from <https://www.mumbrella.asia/2016/07/apac-e-commerce-transaction-abandonment-rates-worlds-highest-and-rising>
- Hon, K.Y., & Tsz, C. H. (2015, March). The influence of subjective norms on behavioral intention in sing e learning: An empirical study in Hong Kong higher education. *International MultiConference of Engineers and Computer Scientists*, 2, 18-20.
- Hopkins, W. G. (2000). Quantitative research design. Retrieved from <http://www.sportsci.org/jour/0001/wghdesign.html>
- Huang, Z., & Benyoucef, M. (2013). From e-commerce to social commerce: A close look at design features. *Electronic Commerce Research and Applications*, 12(4), 246-259.
- Ibrahim, S., Suki, N.M. & Harun, A. (2014). Structural relationships between perceived risk and consumers unwillingness to buy home appliances online with moderation of online consumer Reviews. *Asian Academy of Management Journal*, 19(1), 73–92.
- Information and communication technology satellite account, 2010-2014 (2015). Department of statistic Malaysia, official Portal. Retrieved from

https://www.dosm.gov.my/v1/index.php?r=column/cthem&menu_id=TE5CRUZCblh4ZTZMODZlbnk2aWRRQT09&bul_id=aHBPSStGSU9LUU5VMzVHa29OT1Ewdz09

- Insights and trends of e-commerce in Malaysia. (2017, July 05). Retrieved from <https://aseanup.com/insights-trends-e-commerce-malaysia/>
- Internet usage worldwide - Statistics & Facts. (n.d.). *The Statistics Portal*. Retrieved from <https://www.statista.com/topics/1145/internet-usage-worldwide/>
- Jacob, P. (2016, February 22). Smartphone ownership and internet usage continues to climb in emerging economies. *Pew Research Center*. Retrieved from <http://www.pewglobal.org/2016/02/22/smartphone-ownership-and-internet-usage-continues-to-climb-in-emerging-economies/>
- Jamil, N. A., & Mat, N. K., (2011). To investigate the drivers of online purchasing behavioral in Malaysia based on the theory of planned behavior (TPB): A structural equation modeling (SEM) approach. *International Conference on Management*, 453-460.
- Jarvelainen, J. (2007). Online purchase intentions: An empirical testing of a multiple-theory model. *Journal of Organizational Computing*, 17(1), 53-74.
- Jarvenpaa, S. L., Tractinsky, N., & Vitale, M. (2000). Consumer trust in an internet store, *Information Technology and Management*, (1), 45-71.
- Javadi, M. H. M., Dolatabadi, H. R., Nourbakhsh, M., Poursaeedi, A. & Asadollahi, A. R. (2012). An analysis of factors affecting on online shopping behavior of consumers. *International Journal of Marketing Studies*, 4(5), 81-98.
- Jiang, L., Yang, Z., & Jun, M. (2013). Measuring consumer perceptions of online shopping convenience. *Journal of Service Management*, 24(2), 191-214.
- Keisidou, E., Sarigiannidis, L., & Maditinos, D. (2011). Consumer characteristics and their effect on accepting online shopping, in the context of different product types. *Int. Journal of Business Science and Applied Management*, 6(2), 32-51.
- Kerlinger, F. N. (1973). *Foundations of behavioral research* (2nd ed.). Holt, Reinhart and Wilson: New York.
- Khalifa, M., & Limayem, M. (2003). Drivers of internet shopping. *Communications of the ACM*, 46(12), 233-239.
- Kim, D., & Ammeter, A. P. (2008). Examining shifts in online purchasing behavior: decoding the 'net generation. *Academy of Information and Management Sciences*, 12(1), 7-12.
- Kim, Y. H., & Kim, D. (2005). A study of online transaction self-efficacy, consumer trust, and uncertainty reduction in electronic commerce transaction. *Proceedings of the 38th Annual Hawaii International Conference on System Sciences*. doi:10.1109/hicss.2005.52
- Kirlappos, I., & Sasse, M. A. (2012). Security education against Phishing: a modest proposal for a major rethink. *IEEE Security & Privacy Magazine*, 10(2), 24-32.
- Krejcie, R. V. & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.

- Kshetri, N. (2007). Barriers to e-commerce and competitive business models in developing countries: A case study. *Electronic Commerce Research and Applications*, 6(4), 443-452.
- Kukar-Kinney, M., & Close, A. G. (2009). The determinants of consumers' online shopping cart abandonment. *Journal of the Academy of Marketing Science*, 38(2), 240-250.
- Kumar, A. (2017 Feb 06). Ecommerce tracker: Malaysia deal to slash abandonment rate by 40 percent. *MOLMoneyOnline*. Retrieved from <http://molglobal.mol.com/ecommerce-tracker-malaysia-deal-to-slash-abandonment-rate-by-40-percent/>
- Kwek, C. L., Tan, H. P., & Lau, T. C. (2010). The effects of shopping orientations, online trust and prior online purchase experience toward customers' online purchase intention. *International Business Research*, 3(3), 63.
- Lazar, I., Faciu, M. E., Mata, L., & Lazaar, G. (2016). Strengths and limitations of quantitative research applied in the Education Sciences. *The Future of Education*, 240-244.
- Leboo. L. (2015). Factors influencing consumer online buying behaviour in a project based company. A case of geothermal development company. *Master of Arts*. 1-57.
- Leeraphong, A., & Mardjo, A. (2013). Trust and risk in purchase intention through online social network: A focus group study of Facebook in Thailand. *Journal of Economics, Business and Management*, 1(4), 314-318.
- Lim, Y. J., Osman, A., Salahuddin. S. N., Romle, A. R., & Abdullah, S., (2015). Factors influencing online shopping behavior: the mediating role of purchase intention. *Procedia Economics and Finance*, 35, 401-410.
- Limayem, M., Khalifa, M., & Frini, A., (2000). What makes consumers buy from internet? A *Longitudinal Study of Online Shopping*. 421-432.
- Lin, H. (2007). Predicting consumer intentions to shop online: an empirical test of competing theories. *Electronic Commerce Research and Applications*, 6(4), 433-442.
- Loeb, S., Dynarski, S., McFarland, D., Morris, P., Reardon, Sean, & Reber, S. (2017). Descriptive analysis in education: a guide for researchers.
- Mahalingam, E. (2016 July 02). Rise in online shopping. *TheStarOnline*. Retrieved from <https://www.thestar.com.my/business/business-news/2016/07/02/rise-in-online-shopping/>
- Malaysia Country Commercial Guide. (2017, June 06). *Export.gov*, Retrieved from, <https://www.export.gov/article?id=Malaysia-E-Commerce>
- Malaysia eCommerce Insights | Malaysian eCommerce to Generate 2.5 Billion USD by 2021 (2018). *eshopworld*. Retrieved from <https://www.eshopworld.com/blog-articles/malaysia-ecommerce-insights/>
- Malaysia is becoming a global hub for online scams, Will you be the next victim? (2015, December 08). *MalaysianDigest.com*. Retrieved from <http://www.malaysiandigest.com/features/583209-malaysia-is-becoming-a-global-hub-for-online-scams-will-you-be-the-next-victim.html>
- Malhotra, N. K. (2010). *Marketing research: An applied orientation* (6th ed.). Harlow, UK: Pearson Education Limited.

- Mansori, S., Cheng, B.L., & Lee, H. S. (2012). A study of E-Shopping intention in Malaysia: the influence of generation X & Y. *Australian Journal of Basic and Applied Sciences*, 6(8), 28-35.
- Marshall, C. (2016). Face-to-face interviews - Advantages and disadvantages. Retrieved from <https://www.linkedin.com/pulse/face-to-face-interviews-advantages-disadvantages-charlie-marshall>
- Martin, R. J., Usdan, S., Nelson, S., Umstattd, M. R., LaPlante, D., Perko, M., & Shaffer, H. (2010). Using the theory of planned behaviour to predict gambling behaviour. *Psychology of Addictive Behaviours*, 24(1), 89-97.
- Mastercard Worldwide Insights (2008). "Online shopping in Asia-Pacific – patterns, trends and future growth", Retrieved from www.mastercard.com/us/company/en/insights/studies/2008/asiaonlineshopping.html
- Mathers, N., Fox, N., & Hunn, A. (2009). Surveys and questionnaires. *The NIHR RDS for the East Midlands / Yorkshire & the Humber*. Retrieved from https://www.rds-yh.nihr.ac.uk/wp-content/uploads/2013/05/12_Surveys_and_Questionnaires_Revision_2009.pdf
- Michael, P.B. (2011, November 8). "Nonprobability sampling". Encyclopaedia of survey research methods. Retrieved from file:///C:/Users/Lenovo/Downloads/5.2_NonprobabilitySampling%20(1).pdf
- Monswé, T. P., Dellaert, B. G., & Ruyter, K. D. (2004). What drives consumers to shop online? A literature review. *International Journal of Service Industry Management*, 15(1), 102-121.
- Mudaa, M, Mohdb, R., & Hassan, S. (2016). Online purchase behavior of generation Y in Malaysia: procedia economics and finance, 37, 292 – 298.
- Murad, K. & Salleh, S.M. (2014). Confession of an online shopaholic: teenage youths' purchasing behavior towards online retailing preferences. *International Journal of Social Science and Humanity*, 4(1), 35-39.
- Nazir, S., Tayyab, A., Sajid, A., Rashid, H., & Javed, I. (2012). How online shopping is affecting consumers buying behaviour in Pakistan? *International Journal of Computer Science Issues*, 9(3), 486-495.
- Ngugi, K. (2014). *Factors influencing online shopping adoption in Kenya: A case of Westlands district*. University of Nairobi.
- Noort, V. G., Kerkhof, P., & Fennis, B.M. (2008). The persuasiveness of online safety cues: the impact of prevention focus compatibility of web content on consumers risk perceptions, attitudes, and intentions", *Journal of Interactive Marketing*, 22, 58-72.
- Norton Shopping Guarantee, It's what Online Shoppers want for their money and Retailers for their business. (2018). Retrieved from, <https://www.theshoppingguarantee.com/>
- Omar, C.M.Z.C & Anas, T. (2014). E-commerce in Malaysia: development, implementation and challenges. *International Review of Management and Business Research*, 3(1), 291-298.

- Online cheating cases up last year, says minister. (2017, Feb 07). *Online Malay Mail*. Retrieved from <http://www.themalaymailonline.com/malaysia/article/online-cheating-cases-up-last-year-says-minister#dIIqP3GXQwcYiCLv.97>
- Online shopping – definition and meaning. (2017, October 24). Retrieved from <http://marketbusinessnews.com/financial-glossary/online-shopping-definition-meaning/>
- Online shopping scams. (2015, July 16). Retrieved from <https://www.scamwatch.gov.au/types-of-scams/buying-or-selling/online-shopping-scams>
- Online Transaction. (2018). Retrieved from <http://www.investinganswers.com/dictionary/online-transaction>
- Online-shopping and E-commerce worldwide: Statistics & Facts. (n.d.). *The Statistics Portal*. Retrieved from <https://www.statista.com/topics/871/online-shopping/>
- Orapin, L., (2009). Factors influencing internet shopping behaviour: a survey of consumers in Thailand. *Journal of Fashion Marketing and Management*, 13(4), 501-513.
- Oxford Dictionaries. (2018). Retrieved from Definition of ethics in English: <https://en.oxforddictionaries.com/definition/ethics>
- Oxford Dictionaries. (2018). Retrieved from Definition of online shopping in English: https://en.oxforddictionaries.com/definition/online_shopping
- Pandey, P., & Pandey, M. M. (2015). Research methodology: tools and techniques. 1-118.
- Pillay, S. (2017, June 04). Online shoppers in a web of scammers. *New Straits Times*. Retrieved from <https://www.nst.com.my/news/exclusive/2017/06/245502/online-shoppers-web-scammers>
- Qualitative and quantitative research techniques for humanitarian needs assessment. (2012, May). ACAPS. Retrieved from file:///C:/Users/ASUS/Downloads/qualitative_and_quantitative_research_techniques.pdf
- Rajaendram, R. (2016, June 04). Where are the boys heading? Retrieved from, <https://www.thestar.com.my/news/education/2016/06/05/where-are-the-boys-heading/>
- Razali, N.M., & Yap, B.W. (2010). Power comparisons of some selected normality tests. *Proceedings of the regional conference on Statistical Sciences*, 126-138.
- Rezaei, S., & Amin, M. (2013). Exploring online repurchase behavioural intention of university students in Malaysia. *J. for Global Business Advancement*, 6(2), 92.
- Rohm, A. J., & Swaminathan, V. (2004). A typology of online shoppers based on shopping motivations. *Journal of Business Research*, 57(7), 748-757.
- Ruxyn, T. (2017). Rights you didn't know you had as an online shopper in Malaysia. Retrieved from <http://says.com/my/lifestyle/know-your-rights-as-an-online-shopper-in-malaysia>
- Salkind, N. J. (2010). *Statistics for people who (think they) hate statistic* (3rd ed.). London, UK: Sage Publications Ltd.

- Salkind, N. J. (2017). *Statistics for people who (think they) hate statistic* (6th ed.). London, UK: Sage Publications Ltd.
- San, L.Y., Omar, A. & Thurasamy, R. (2015). Online purchase: A study of generation Y in Malaysia. *International Journal of Business and Management*, 10(6), 1-7.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (5th ed.). London: Pearson Publisher.
- Schaupp, L. C., & Belanger, F. (2005). A conjoint analysis of online consumer satisfaction. *Journal of Electronic Commerce Research*, 6(2), 95–111.
- Schöder, D., Ding, F., & Campos, J. K. (2016). The impact of E-Commerce development on Urban Logistics Sustainability. *Open Journal of Social Sciences*, 4(3), 1-6.
- Sekaran, U., & Bougie, R. (2013). *Research method for business: A skill-building approach* (6th edition.). New York, NY: John Wiley& Sons.
- Seock, Y., & Bailey, L. R. (2008). The influence of college students shopping orientations and gender differences on online information searches and purchase behaviours. *International Journal of Consumer Studies*, 32(2), 113-121.
- Shaheen M., Cheng, Boon L., Lee, & Hui, S. (2012). A study of –shopping intention in Malaysia: the influence of generation X & Y. *Australian Journal of Basic and Applied Sciences*, 6(8), 28-35.
- Shekofteh, H., Ramazani, F., & Shirani, H. (2017). Optimal feature selection for predicting soil CEC: Comparing the hybrid of ant colony organization algorithm and adaptive network-based fuzzy system with multiple linear regression. *Geoderma*, 298, 27-34.
- Sincero, S. M. (2012). Types of survey questions. Retrieved from <https://explorable.com/types-of-survey-questions>
- Singh, A. S., & Masuku, M. B. (2014). Sampling techniques & determination of sample size in applied statistics research: an overview. *International Journal of Economics, Commerce and Management*, 2(11), 1-22.
- Sinha, J., & Kim, J. (2012). Factors affecting Indian consumers' online buying behavior. *Innovative Marketing*, 8(2).
- Siti, O. N., Mohammed, A.J. A., & Nik Kamariah, N. M. (2012). Actual online shopping behavior among Jordanian customers. *American Journal of Economics*, 125-129.
- Smith, R. G. (2010). Identify theft and fraud. In Y. Jewkes, & M. Yar (Eds.), *Handbook of internet crime* (pp. 273–301). Cullompton, England: Wiley.
- Soopramanien, D. G. R., & Robertson, A. (2007). Adoption and usage of online shopping: an empirical analysis of the characteristics of “buyers” “browsers” and “non-internet shoppers.” *Journal of Retailing and Consumer Services*, 14(1), 73–82.
- Spangenberg, E. R., Voss, K. E., & Crowley, A. E. (1997). Measuring the hedonic and utilitarian dimensions of attitude: a generally applicable scale. *Advances in Consumer Research*, 24(1), 235-241.
- Suki, N. M. (2012). Examining factors influencing customer satisfaction and trust towards vendors on the mobile internet. *Journal of Internet Banking and Commerce*, 17(1).

- Suki, N. M., Ramayah, T., & Suki, N. M. (2008). Internet shopping acceptance. *Direct Marketing: An International Journal*, 2(2), 97-110.
- Sultan, M. U., & Uddin, MD., N. (2011). Consumers' attitude towards online shopping. *Master Thesis in Business Administration*.
- Surbhi, S. (2016). Difference between primary and secondary data. Retrieved from <http://keydifferences.com/difference-between-primary-and-secondary-data.html>
- Tan, S. J. (1999). Strategies for reducing consumer's risk aversion in Internet shopping. *Journal of Consumer Marketing*, 16(2), 163-178.
- Tavakol, M. & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55.
- The Malaysian higher education system - An overview. (2015). Retrieved from <https://www.studymalaysia.com/education/higher-education-in-malaysia/the-malaysian-higher-education-system-an-overview>
- The Shopping Guarantee. (2017). *Norton shopping guarantee*. Retrieved from <https://www.theshoppingguarantee.com/>
- Top e-commerce sites in Malaysia 2017. (2017, November 14). Retrieved from <https://aseanup.com/top-e-commerce-sites-malaysia/>
- Truong, Y. (2009). An evaluation of the theory of planned behaviour in consumer acceptance of online video and television services. *The Electronic Journal Information Systems Evaluation*, 12(2), 177-186.
- Tsydybey, N. (2014). *Consumer intentions to buy grocery products online: A comparison between the Netherlands and Russia*. School of Humanities Tilburg University, Dr. A.A. Maes & Dr. C.H. Wijk.
- Vijaindren, R. (2017, June 09). Impulse buying: Gen-Y face online shopping debt trap. *New Straits Times*. Retrieved from <https://www.nst.com.my/news/exclusive/2017/07/255745/impulse-buying-gen-y-face-online-shopping-debt-trap>
- Vijayasathiy, L.R., Jones, J.M. (2000). Print and internet catalog shopping: assessing attitudes and intentions. *Internet Res*, 10(3), 191-202.
- Vijayasathiy, L., & Jones, J. M. (2000). Intentions to shop using internet catalogues: exploring the effects of product types, shopping orientations, and attitudes towards computers. *Electronic Markets*, 10(1), 29-38.
- Voon, J.P., Ngui, K.S., & Agrawal, A. (2011). Determinants of willingness to purchase organic food: an exploratory study using structural equation modelling. *International Food and Agribusiness Management Review*, 14(2), 103-120.
- Voss, K. E., Spangenberg, E. R., & Grohmann, B. (2003). Measuring the hedonic and utilitarian dimensions of consumer attitude. *Journal of marketing research*, 40(3), 310-320.
- Willams, C. (2007). Research Methods. *Journal of Business & Economic Research*, 5(3), 65-72.
- Wilsem, J.V. (2011). 'Bought it, but never got it' assessing risk factors for online consumer fraud victimization. *European sociological review*, jcr053.

- Wilson, S., Leong, P. Nge, C. & Hong, N.M. (n.d.) Trust and credibility of urban Youth on online news media. *Journal of Communication Jilid*, 27(2), 97-120.
- Wong, K. L., Ong, S. F., & Keuk, T. Y. (2012). Constructing a survey questionnaire to collect on service quality of business academic. *European Journal of Social Sciences*, 29(2), 209-211.
- Workman, D. (2014, October 22). Online shopping soars but so do debt risks. Retrieved from <https://canada.creditcards.com/credit-card-news/online-shopping-soars-but-so-do-debt-risks-1280/>
- Wu, S. (2003). The relationship between consumer characteristics and attitude toward online shopping. *Marketing Intelligence & Planning*, 21(1), 37-44.
- Xiao, B., & Benbasat, I. (2011). Product-related deception in ecommerce: a theoretical perspective. *MIS Quarterly*, 35(1), 169-196.
- Xie, G., Zhu, J., Lu, Q., & Xu, S., (2011). Influencing factors of consumer intention towards web group buying, 1397-1401.
- Yoldas, S, (2011). A research about buying behaviors of online customers: comparison of Turkey with UK. *MSc International Management*. 1-64.
- Yoon, C. (2009). The effects of national culture values on consumer acceptance of e-commerce: online shoppers in China. *Information & Management*, 46(5), 294-301.
- Youn, S. (2009). Determinants of online privacy concern and its influence on privacy protection behaviors among young adolescents. *Journal of Consumer Affairs*, 43(3), 389-418.
- Zamboni, J. (2017). What is the meaning of sample size? Retrieved from <https://sciencing.com/meaning-sample-size-5988804.html>
- Zhang, H., Wu, P., Yin, A., Yang, X., Zhang, M., & Gao, C. (2017). Prediction of soil organic carbon in an intensively managed reclamation zone of eastern China: a comparison of multiple linear regressions and the random forest model. *Science of the Total Environment*, 592, 704-713.
- Zhou, L., Dai, L. W., & Zhang, D. S. (2007). Online shopping acceptance model- a critical survey of consumer factors in online shopping. *Journal of Electronic Commerce Research*, 8(1), 41-42.
- Zhou, T., (2011). Understanding online community user participation: a social influence perspective. *Internet Research*, 21(1), 67-81.
- Zikmund, W. G. (2003). *Business research method* (7th ed.). South-Western: Thomson.
- Zikmund, W. G., & Babin, B. J. (2010). *Exploring marketing research* (10th ed.). Australia: South-Western/Cengage Learning.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). *Business research methods* (9th ed.). Ohio, US: Cengage Learning.
- Zuriahti Azura, R. (2010). *The influence of the intention online purchase among Universiti Kuala Lumpur, Malaysian institute of information technology lecturer's and staff's*. Malaysian Institute of Information Technology.



UNIVERSITI TUNKU ABDUL RAHMAN
FACULTY OF ARTS AND SOCIAL SCIENCE
BACHELOR OF COMMUNICATION (HONS)
PUBLIC RELATIONS

**Factors Influencing the Online Shopping Behaviour of
Students in Universiti Tunku Abdul Rahman (UTAR),
Kampar campus**
Survey Questionnaire

Dear respondent,

We are final year undergraduate students pursuing Bachelor of Communication (Hons) Public Relations from the Faculty of Arts and Social Science at Universiti Tunku Abdul Rahman (UTAR). The purpose of this survey is to conduct a research to determine the factors that influence the online shopping behaviour of students in UTAR, Kampar campus. Please answer all the questions to the best of your knowledge. We assure that all information and responses will be kept private and confidential and used solely for academic purpose.

Thank you for your participation.

Instructions:

1. This questionnaire consists of TWO sections. Please answer ALL questions in ALL sections.
 2. Completion of this form will only take you approximately 10 minutes.
 3. The contents of this questionnaire will be kept strictly confidential.
-

Please sign as you are agree to participate in this survey.

I agree

Signature

Prepared by:

Name	Student ID
Chai Kar Yen	15AAB04577
Lee Yong Wei	14AAB04161
Peh Jing Ting	14AAB03964
Yap Hew Yeng	15AAB05265

SECTION A: DEMOGRAPHICS

Please tick (✓) on the relevant answer and fill in the blank for the question given below.

1. Gender

- ☐ Male
- ☐ Female

2. Age

- ☐ 18-20
- ☐ 21-23
- ☐ 24-26
- ☐ 27 or above

3. Faculty or foundation programme

- ☐ Foundation in Arts
- ☐ Foundation in Science
- ☐ Faculty of Arts and Social Science
- ☐ Faculty of Business and Finance
- ☐ Faculty of Science
- ☐ Faculty of Engineering and Green Technology
- ☐ Faculty of Information and Communication Technology

4. Course (only for undergraduate students):

5. Have you ever made an online purchase before?

- ☐ Yes
- ☐ No

6. How many times have you bought things online (during the past six months)?

- ☐ Never
- ☐ 1-2 times
- ☐ 3-5 times
- ☐ 6-10 times
- ☐ 11-20 times
- ☐ 21 times or above

7. How long have you been shopping online?

- ☐ Less than 3 Months
- ☐ 3-6 months
- ☐ 6-12 months
- ☐ 1-2 years
- ☐ 2-3 years
- ☐ 3-5 years
- ☐ More than 5 years

8. What would be your estimate of online shopping expenditure (during the past six months)?

- ☐ Less than RM50
- ☐ RM50-RM100
- ☐ RM100-RM300
- ☐ RM300-RM500
- ☐ RM500 above

9. Please tick the types of products that you purchased online (can be more than one item).

- ☐ Electronic products (Mobile phones, tablets, cameras, etc.)
- ☐ Clothes/Shoes
- ☐ Jewellery/Watches
- ☐ Home and living (Beddings, home appliances, kitchen, dining, bathroom etc.)
- ☐ Books and Magazines
- ☐ Wines and Spirits
- ☐ Tickets (Movie, concerts, plays, etc.)
- ☐ Software
- ☐ Travel (Airline, hotel bookings)
- ☐ Hair and Beauty (Fragrances, hair care products, skin care products etc.)
- ☐ Others. Please indicate_____

SECTION B: FACTORS INFLUENCING THE ONLINE SHOPPING BEHAVIOUR OF STUDENTS

Instruction: Respondents are required to indicate the extent to which they agree or disagree with each statement by using 5 Likert scale [(1) = strongly disagree; (2) = disagree; (3) = neutral; (4) = agree and (5) = strongly agree] response framework. Please circle only ONE option for each question below.

A. ATTITUDE

No.	Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	Online shopping is enjoyable.	1	2	3	4	5
2.	Online shopping is agreeable.	1	2	3	4	5
3.	Online shopping is pleasant.	1	2	3	4	5
4.	Online shopping is practical.	1	2	3	4	5
5.	Online shopping is efficient.	1	2	3	4	5

B. PERCEIVED RISKS

No.	Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I	Security Risks					
1.	I feel that my debit/credit card details may be misused if I shop online.	1	2	3	4	5
2.	I might get overcharged if I shop online as the retailer has my debit/credit card information.	1	2	3	4	5
3.	I feel that my personal information given for transaction to the retailer may be compromised to third party.	1	2	3	4	5
II	Product Risks					
1.	I might not get what I ordered through online shopping.	1	2	3	4	5
2.	I might receive malfunctioning products.	1	2	3	4	5
3.	It is hard to judge the quality of product over Internet.	1	2	3	4	5
III	Convenience Risks					
1.	Finding right product online is difficult.	1	2	3	4	5
2.	If I shop online I cannot wait till the product arrives.	1	2	3	4	5
3.	I cannot examine the product when I shop online.	1	2	3	4	5

4.	It is not easy to cancel orders when shop online.	1	2	3	4	5
IV	Non-delivery Risks					
1.	I might not receive the product ordered online.	1	2	3	4	5
2.	I do not shop online because of non-availability of reliable & well-equipped shipper.	1	2	3	4	5

C. PERCEIVED BENEFITS

No.	Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I	Convenience					
1.	I shop online as I do not have to leave home for shopping.	1	2	3	4	5
2.	I shop online as I can shop whenever I want.	1	2	3	4	5
3.	Online shopping makes my shopping easy.	1	2	3	4	5
4.	I shop online as I can take as much time as I want to decide.	1	2	3	4	5
II	Availability					
1.	I shop online as I can get detailed product information online.	1	2	3	4	5
2.	I shop online as I get broader selection of products online.	1	2	3	4	5
3.	I use online shopping for buying products which are not easily available in the nearby market or are unique (new).	1	2	3	4	5
III	Time Saving					
1.	I shop online as I can save myself from chaos of traffic.	1	2	3	4	5
2.	I shop online as I can save myself from market crowd.	1	2	3	4	5

D. SUBJECTIVE NORMS

No.	Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	My family members would think that online shopping is a good idea.	1	2	3	4	5
2.	My close friends would think that online shopping is a good idea.	1	2	3	4	5
3.	The opinions and experiences of my family affect my purchase decision.	1	2	3	4	5

4.	The opinions and experiences of my friends affect my purchase decision.	1	2	3	4	5
5.	The opinions and experiences discussed in online forums affect my purchase decision.	1	2	3	4	5

E. PERCEIVED BEHAVIOURAL CONTROL

No.	Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	I do not shop online when Internet speed (Web page download time) is very slow.	1	2	3	4	5
2.	I do not shop online when I do not have a computer at hostel/home.	1	2	3	4	5
3.	I do not shop online when I do not have a computer with Internet connection.	1	2	3	4	5
4.	I do not shop online when I do not have a debit/credit card.	1	2	3	4	5
5.	I am confident to shop online even if no one is there to show me how to do it.	1	2	3	4	5

F. INTENTION

No.	Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	I intend to shop online in the future.	1	2	3	4	5
2.	I would continue to see myself to shop online.	1	2	3	4	5
3.	I would seriously consider to shop online again.	1	2	3	4	5

G. BEHAVIOUR

No.	Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	I often buy goods and services online.	1	2	3	4	5
2.	I spend a lot of money shopping online.	1	2	3	4	5
3.	I buy goods and services from many online market platforms.	1	2	3	4	5
4.	I buy a wide variety of products and services online.	1	2	3	4	5

Thank you for your participation.
All responses will be kept private and confidential.

Descriptive Analysis

A) Gender

Survey Respondents by Gender

Gender	Frequency	Percentage (%)
Male	150	38.5
Female	240	61.5
Total	390	100.0

B) Age

Survey Respondents by Age

Age	Frequency	Percentage (%)
18-20	169	43.3
21-23	190	48.7
24-26	30	7.7
27 or above	1	0.3
Total	390	100.0

C) Faculty or Foundation Programme

Faculty or Foundation Programme	Frequency	Percentage (%)
Foundation in Arts	63	16.2
Foundation in Science	25	6.4
Faculty of Arts and Social Science	112	28.7
Faculty of Business and Finance	102	26.2
Faculty of Science	27	6.9
Faculty of Engineering and Green Technology	30	7.7
Faculty of Information and Communication Technology	31	7.9
Total	390	100.0

D) Course

Course	Frequency	Percentage (%)
Foundation in Arts	64	16.4
Foundation in Science	24	6.2
Course (<i>undergraduate students</i>)		
Journalism	6	1.5
Public Relations	34	8.7
Psychology	33	8.5
Advertising	15	3.8
Business Administration	29	7.4
Banking and Finance	18	4.6
Electronic Engineering	14	3.6
Foundation in Science	24	6.2
Commerce Accounting	28	7.2
Computer Science	14	3.6
Financial Economy	9	2.3
Environmental Engineering	3	0.8
Entrepreneurship	7	1.8
Food Science	12	3.1
Construction Management	4	1.0
Logistic	1	0.3
Finance	10	2.6
Chinese Studies	13	3.3
Information Systems Engineering	9	2.3
Biomedical Science	1	0.3
Business Information Systems	7	1.8
Biochemistry	3	0.8
Statistical Computing and Operations Research	3	0.8
Biomedical Science	3	0.8
English Education	9	2.3
Communications and Networking	6	1.5

English Language	2	0.5
Marketing	1	0.3
Petrochemical Engineering	8	2.1
Total	390	100.0

E) Have respondents ever made an online purchase before?

Survey Respondents by Question: Have respondents ever made an online purchase before?

Answers	Frequency	Percentage (%)
Yes	390	100.0
No	-	-
Total	390	100.0

F) How many times have respondents bought things online (during the past six months)?

Survey Respondents by Question: How many times have respondents bought things online (during the past six months)?

Number of times	Frequency	Percentage (%)
Never	4	1.0
1-2 times	133	34.1
3-5 times	138	35.4
6-10 times	76	19.5
11-20 times	19	4.9
21 times or above	20	5.1
Total	390	100.0

G) How long have respondents been shopping online?

Survey Respondents by Question: How long have respondents been shopping online?

Duration	Frequency	Percentage (%)
Less than 3 months	94	24.1
3-6 months	81	20.8
6-12 months	62	15.9

1-2 years	53	13.6
2-3 years	39	10.0
3-5 years	41	10.5
More than 5 years	20	5.1
Total	390	100.0

H) What would be the respondents' estimate of online shopping expenditure (during the past six months)?

Survey Respondents by Question: What would be the respondents' estimate of online shopping expenditure (during the past six months)?

Amount	Frequency	Percentage (%)
Less than RM 50	54	13.8
RM 50-RM100	121	31.0
RM100-RM300	130	33.3
RM300-RM500	50	12.8
RM500 above	35	9.0
Total	390	100.0

I) The Types of Products that Respondents Purchased Online.

Survey Respondents by the Types of Products that Respondents Purchased Online-
Electronics products

Answer	Frequency	Percentage (%)
Yes	135	34.6
No	255	65.4
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online-Clothes or Shoes

Answer	Frequency	Percentage (%)
Yes	290	74.4
No	100	25.6
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online-Jewellery or Watches

Answer	Frequency	Percentage (%)
Yes	81	20.8
No	309	79.2
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online-Home and Living Products

Answer	Frequency	Percentage (%)
Yes	60	15.4
No	330	84.6
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online- Books and Magazines

Answer	Frequency	Percentage (%)
Yes	81	20.8

No	309	79.2
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online- Wines and Spirits

Answer	Frequency	Percentage (%)
Yes	3	0.8
No	387	99.2
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online- Tickets

Answer	Frequency	Percentage (%)
Yes	225	57.7
No	165	42.3
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online- Software

Answer	Frequency	Percentage (%)
Yes	35	9.0
No	355	91.0
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online- Travel

Purpose

Answer	Frequency	Percentage (%)
Yes	157	40.3
No	233	59.7
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online- Hair and

Beauty Products

Answer	Frequency	Percentage (%)
Yes	130	33.3
No	260	66.7
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online- Sports

Equipment

Answer	Frequency	Percentage (%)
Yes	3	0.8
No	387	99.2
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online- Games

Answer	Frequency	Percentage (%)
Yes	4	1.0
No	386	99.0
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online- Pet
Product

Answer	Frequency	Percentage (%)
Yes	2	0.5
No	388	99.5
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online- Albums

Answer	Frequency	Percentage (%)
Yes	4	1.0
No	386	99.0
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online- Toys

Answer	Frequency	Percentage (%)
Yes	1	0.3
No	389	99.7
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online- Music

Instrument

Answer	Frequency	Percentage (%)
Yes	1	0.3
No	389	99.7
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online- E-books

Answer	Frequency	Percentage (%)
Yes	1	0.3
No	389	99.7
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online- Foods

Answer	Frequency	Percentage (%)
Yes	1	0.3
No	389	99.7
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online- Mobile

Prepaid

Answer	Frequency	Percentage (%)
Yes	1	0.3
No	389	99.7
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online- Luggage

Answer	Frequency	Percentage (%)
Yes	1	0.3
No	389	99.7
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online- Water Bottle

Answer	Frequency	Percentage (%)
Yes	1	0.3
No	389	99.7
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online-Nutrition

Answer	Frequency	Percentage (%)
Yes	3	0.8
No	387	99.2
Total	390	100.0

Survey Respondents by the Types of Products that Respondents Purchased Online-Stationery

Answer	Frequency	Percentage (%)
Yes	1	0.3
No	389	99.7
Total	390	100.0

Central Tendencies Measurement of Constructs

Constructs	Items	Mean	Standard Deviation
Attitude	A 1	4.01	0.747
	A 2	3.89	0.714
	A 3	3.92	0.770
	A 4	3.83	0.831
	A 5	4.11	0.867
Perceived Risks	BI 1	3.16	0.944
	BI 2	2.94	1.018
	BI 3	3.32	1.005
	BII 1	3.38	1.035
	BII 2	3.68	0.950
	BII 3	4.00	0.939
	BIII 1	3.13	1.082
	BIII 2	3.20	1.099
	BIII 3	3.84	0.944
	BIII 4	3.26	1.021
	BIV 1	3.15	1.043
	BIV 2	2.66	0.982
Perceived Benefits	CI 1	3.83	0.846
	CI 2	4.08	0.766
	CI 3	4.07	0.777
	CI 4	4.13	0.749
	CII 1	3.53	0.914
	CII 2	3.85	0.796
	CII 3	4.01	0.900
	CIII 1	3.98	0.833
	CIII 2	3.99	0.900
Subjective Norms	D 1	3.31	1.008
	D 2	3.98	0.803
	D 3	3.54	0.982
	D 4	3.67	0.888

	D 5	3.86	0.857
Perceived Behavioural Control	E 1	3.78	1.016
	E 2	3.29	1.157
	E 3	3.75	1.058
	E 4	3.74	1.039
	E 5	3.46	0.982
Intention	F 1	4.02	0.717
	F 2	4.02	0.729
	F 3	3.98	0.777
Online Shopping Behaviour	G 1	3.48	0.961
	G 2	3.05	1.043
	G 3	3.30	1.029
	G 4	3.38	1.014

Normality Test

Constructs	Items	Skewness	Kurtosis
Attitude	A 1	-0.831	1.651
	A 2	-0.560	1.295
	A 3	-0.577	0.811
	A 4	-0.592	0.521
	A 5	-1.060	1.432
Perceived Risks	BI 1	-0.088	-0.590
	BI 2	0.275	-0.564
	BI 3	-0.111	-0.652
	BII 1	-0.319	-0.794
	BII 2	-0.605	-0.030
	BII 3	-0.875	0.416
	BIII 1	0.014	-0.754
	BIII 2	-0.001	-0.849
	BIII 3	-0.869	0.640
	BIII 4	-0.148	-0.648
	BIV 1	-0.079	-0.749
	BIV 2	0.420	-0.240
Perceived Benefits	CI 1	-0.727	0.392
	CI 2	-0.800	0.741
	CI 3	-0.616	0.301
	CI 4	-0.624	0.388
	CII 1	-0.525	0.076
	CII 2	-0.546	0.396
	CII 3	-0.824	0.361
	CIII 1	-0.722	0.467
	CIII 2	-0.890	0.712
Subjective Norms	D 1	-0.298	-0.590
	D 2	-0.947	1.679
	D 3	-0.477	-0.194
	D 4	-0.623	0.251

	D 5	-0.671	0.364
Perceived Behavioural Control	E 1	-0.887	0.364
	E 2	-0.147	-0.990
	E 3	-0.702	-0.259
	E 4	-0.727	-0.045
	E 5	-0.448	-0.200
Intention	F 1	-0.822	1.988
	F 2	-0.715	1.302
	F 3	-0.489	0.145
Online Shopping Behaviour	G 1	-0.289	-0.455
	G 2	0.034	-0.519
	G 3	-0.413	-0.372
	G 4	-0.381	-0.373