

A Study on Factors influence on customers buying behavior towards online shopping during Covid-19 pandemic in Malaysia

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DECLARATION

I hereby declare that the research project is based on my original work except for quotations and citations that have been duly acknowledged. I also declare it has not been previously or concurrently submitted for any other degree at University Tun Abdul Razak or other institutions.

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Abstract of the project paper submitted to the Senate of Universiti Tun Abdul Razak in partial fulfilment of the requirements for the Master of Business Administration

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Online shopping trend has increased in Malaysia especially during covid-19 situation. During this pandemic situation, all face-to-face activities were stuck, and individuals move towards virtual platforms. Thus, the purpose of this study is to examine the online shopping factors (perceived risk, trust, and product variety) influence on consumers online buying behavior in Kelang Valley Malaysia. To attain this purpose, quantitative research methodology was adopted where survey strategy was used to collect the data. In survey strategy, questionnaire was used to collect data from targeted population (customers who preferred online shopping). A total of 327 sample size was selected. Data analysed through SPSS where descriptive and inferential analysis were conducted to give the answer of the research objectives. The findings showed that all three variables (product variety, trust, and perceived risk) are significant predictor of the online buying behavior of consumers in Malaysia. However, product variety found to be a stronger predictor of the online buying behavior of consumers.

Keywords: Consumer Behaviour, Shopping Pattern, Online Shopping

CHAPTER 1: INTRODUCTION

1.1 Background of the Study

Due to the Covid-19 pandemic, the worldwide economy and businesses have suffered and continue to suffer enormous losses. The ambiguity in which trades and end customers found themselves engrossed is further intensified by numerous aspects, including income deterioration, international travel limitations, fluctuating customer demand, and the shifting behaviour of market players (Leach et al., 2021). Lockdown situation, isolation, social distancing, and other actions in familiarised to limit the spread of this virus have commended customers for buying more in the online stores instead of face to face buying (Alessa et al., 2021). Thus, with the outbreak of the covid-19 pandemic, the development of e-commerce has accelerated in world countries, including Malaysia. Therefore, with the outbreak of the COVID-19 epidemic and the growing importance of online business, the study of online consumer behaviour is of certain relevance.

In Malaysia, the lockdown was also implemented to stop the spread of the covid-19 outbreak where most people could not go anywhere except to purchase groceries and other rudimentary requirements, and thus in this situation, online platforms became found a suitable medium for spending (Kumar et al, 2020). Thus, Malaysian consumers tend to buy online instead of offline shopping for safety motives to avoid being diseased by the COVID-19 pandemic. According to Rakuten Insight Surveys Malaysia (2020), about 72% of the consumers preferred online buying in Malaysia during pandemic situation. However, various factors impact on consumers' online buying behaviour, such as perceived risk, perceived uncertainty, trust and product variety that, need to be examined. Despite various researches concentrating on customers' buying behaviour, the current study is more focused on normal consumers' behaviour during the COVID-19 pandemic situation. Therefore, this study aimed to identify the factors influencing on consumers' online buying behaviour during the pandemic.

1.2 Problem Statement

Covid-19 outbreak has changed the way of businesses internationally and also has shifted the buying behaviour of consumers. This pandemic situation has increased the trend of online

shopping among consumers in all over the world, including in Malaysia. Due to the thriving of online actions, particularly online spending, this study is concerned with examining the association between aspects such as perceived risk, trust and product variety influencing Malaysian customers' buying behaviour while in online shopping during the COVID-19 pandemic. According to Shariff and Ishak (2021), there is a dearth of adequate research related to this issue in Malaysia, and it is required to further understand the behaviour of the customers in online shopping. Similarly, plenty of businesses have transmuted or extended their dealings from traditional physical supplies to online supplies to emphasis on dealings of merchandises or services through electronic structures such as net and other computer systems (Ordun, 2015). As a matter of fact, e-commerce in Malaysia is still growing from the current prototype.

Despite the increasing trend of online shopping, various factors are an influence on consumers' buying behaviour in online shopping. For example, Kumar et al. (2020) found that perceived risk is a more crucial aspect of consumers' online buying intention, while Liao et al. (2017) found that perceived uncertainty and trust are more important aspects of online shopping. In contrast, Thibaut and Kelley (2017) pointed out that product variety and risk are more influential aspects of online shopping. In literature, there are limited studies done by factors affecting online buying behavior in South East Asian specifically in Malaysia. Weng (2018) discussed that website quality and perceived risk and online purchase intention in China; Chiang (2018) discussed about Experiential Value affects Purchase Intentions for Online-to-Offline Goods: Consumer Feedback as a Mediator. Nisha Gupta and Rajiv Jain (2017) in their study titled "Consumer Behaviour towards E-Commerce: Online Shopping in India" identified that there are major security concerns in online transactions and at present people do not feel comfortable doing the shopping online. According to Manish Kumar (2016) in his study provides some useful insights on consumers' purchasing intention and behaviour. It has been revealed that the three key factors, i.e., perceived risk, trust, and reviews affect the consumers' intention for online shopping. Vojtech (2017) found that product variety and trust influence on consumers online buying behavior in Indonesia. It concludes that perceived risk, trust and product variety are indicators that influence the consumers' online buying behavior.

However, in literature, it is arguable which variable is more important for consumers in online buying behaviour. Thus, this research is conducted to fill the literature gap of factors influencing on customers' buying behaviour in online shopping during the covid-19 pandemic in Malaysia.

1.3 Study Aim Questions and Objectives

The primary aim of this research paper is concerned with the critical assessment of the factors that influence customers' buying behaviour towards online shopping during the Covid-19 pandemic. The country of Malaysia has been undertaken as the primary case study for the fulfilment of the aim of this investigation. The objectives which have been created by the researcher based on the aim mentioned above are stated as follows:

1.3.1 Research Questions

1. To what extent perceived risk impact consumers' buying behaviour towards online shopping during the Covid-19 pandemic in Malaysia?
2. To what extent trust impact consumers' buying behaviour towards online shopping during the Covid-19 pandemic in Malaysia?
3. To what extent product variety impact consumers' buying behaviour towards online shopping during the Covid-19 pandemic in Malaysia?

1.3.2 Research Objectives

1. To examine the relationship between perceived risk and customers buying behaviour towards online shopping during the Covid-19 pandemic in Malaysia.
2. To examine the relationship between trust and customers' buying behaviour towards online shopping during the Covid-19 pandemic in Malaysia.
3. To examine the relationship between product variety and customers buying behaviour towards online shopping during the Covid-19 pandemic in Malaysia.

1.5 Scope and Limitations of the Study

The scope of this study is the online shopping channels in Malaysia where customers who preferred to buy online products and services were the target population. Klang Valley is selected to collect the data. quantitative research approach was adopted where questionnaire was used to collect the data. sample size was selected through Krejci and Morgan Table. According to Ecommerce Malaysia (2020), more than 26 million population of Malaysia using internet, thus the sample size for this population was 380 given by Krejci and Morgan.

The limitations of this study are likely to be the usage of the survey method online for the collection of information for this research for the fulfilment of the aim and other goals of this

investigation, as the usage of the method of the survey in person would allow a better understanding of their responses and contribute to the reliability of this results. Moreover, the conduction of the interview among the managers of the e-commerce companies would also allow the researcher to gain an extensive understanding of the effect of the online shopping acceleration on the business prospect of the country during the pandemic. However, the lack of financial assistance from the researcher and the lack of time allotted by the institution for the completion of this study allowed the author to collect a small sample, which limits the aspect of the validity of the results. Hence, these are the only limitations that will be faced by the researcher and this study.

1.6 Significance of the Study

The COVID-19 pandemic has changed vividly and changed the intentions and buying patterns of customers. According to McKinsey (2020), covid-19 not only affected on individuals but also harmed business and economic activities to a great extent. Now consumers are more concerned about their health which has increased the trend of online shopping instead of physical activities. Therefore, the present study is carried out on customers' online buying behaviour and aspects that impact on it during this pandemic situation in Malaysia. SR (stimulus-response) theory by Ivan Pavlov (1988) and the theory of planned behaviour by Ajzen and Fishbein (1980) are adopted to provide a theoretical contribution. In this study, factors such as perceived risk, perceived uncertainty, trust, and product variety are considered as stimuli and consumers' buying behaviour is taken as a response. It will also managerially contribute where online business management can take help in policymaking as well, as marketers can best cater the needs of consumers through online platforms. Online shopping made conceivable the constant buying of numerous goods and services, yet it transformed the purchaser journey map considerably, influencing online businesses to understand this novel experience and to adapt consequently (Haque et al., 2006).

This study might also help the online retailers to build their competitive benefits against possible players. As mentioned earlier, there are large number of Internet users who projected to buying online in forthcoming. In such lucrative market, there will be a large number of online retailers who are involved to arrive into this market. Therefore, the research result permits them to have a richer insight and to progress effectual and active approaches. Therefore, the online retailers are able to encounter customers 'expectancy and therefore enhance their behavioral

intention. Consequently, the possible participants will have problems in taking over the market shares. Products can be easily developed without customers leaving their home. Though, it is difficult for online retailers to control the crucial and significant factors that are valued by the consumers. This study is to help the online retailers in determining the factors that influence on consumers online buying behavior.

In addition, this study will also help online corporations to resize their online volumes to the disadvantage of their offline ones in terms of delivery, technology and stock control. Lastly, for businesses, mainly those in non-essential product areas, it was essential to pivot their corporate models. The current study will also contribute academically, it will help students and researchers to conduct future studies and to identify the research gaps.

1.7 Definitions of the Terms

Perceived Risk: Perceived risks refer to the spirit cost associated with customers' purchasing behavior, which represents a kind of uncertainty about the future (Wei et al. 2018).

Trust: Jarvenpaa and Tractinsky (1999) define trust in the Internet shopping mall context as a consumer's willingness to rely on the seller and act in circumstances where such action makes the consumer vulnerable to the seller.

Product Variety: Product variety is the quantity of different product types provided by online retailer (Saprikis et al., 2010).

Online Buying Behaviour

Online buying behavior is the procedure of how consumers make decisions to buy products or services in ecommerce (Zuroni and Goh, 2012).

1.8 The Organisation of the Study

This study has divided in five chapters including introduction to research, literature review, research methodology, data analysis and discussion.

First chapter contains the introduction of the study which delivers the summary regarding consumers behavior towards online shopping during covid-19 situation, subsequent forthcoming scenarios in online shopping in Malaysia, problem identification, study objectives, study questions and significance of the study.

Second chapter which is related to the literature review where past studies are discussed to develop hypothesis for this study as well as theoretical model is discussed.

Third chapter is the research methodology is discussed in detail where research design, sampling and population are presented to give the overview of research. This chapter is also discussed data collection method that is being used by the researcher. It includes sampling design, questionnaire design. In fourth chapter, collected data from target population will be analysed through SPSS (statistical package for social sciences). Finally, the findings will be discussed in last chapter. Recommendations and conclusion will also be discussed in final chapter.

Chapter four is related to the data analysis where collected data was analyzed using statistical tool (SPSS). in this chapter various statistical tests such as descriptive and inferential analysis were carried out. In inferential analysis regression and correlation tests were used.

Chapter five is related to the conclusion, recommendations and contributions. In this chapter, the researcher has presented the details of findings with justifications, limitations and future studies recommendations and the contributions of this study.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This section of the study is basically discussed the previous studies done by various researchers in the similar area of the current study to evaluate the gaps of existing literature. Throughout this section, there will be complete debate on theoretical and applied opinions of preceding research done in online shopping and factors effecting on consumers buying behavior in online shopping. This chapter consists of theoretical and empirical discussion, conceptual framework, hypothesis development and summary of the chapter. Chapter four will present the analysis of data collection and in final chapter findings will discuss in detail as well as recommendations and conclusions will also discuss in final chapter.

2.2 Theoretical Foundation

This part of the chapter reviews the past studies done in online shopping subsequent consumers behavior towards online shopping and highlighting the factors influencing consumers to shop online.

Theory of Planned Behavior

The theory of planned behaviour presented by Ajzen (1991) is recommended that intentions are the indicator of individuals' various behaviour and how they efforts to achieve various behaviour. He et al. (2008) pointed out that dearth of intention to buy online is the key problem in the growth of online business. Theory of planned behavior planned by Ajzen (1988) which is an extension of Theory of Reasoned Action (TRA) due to the noticeable constraint in the preceding theory in dealing with intended behavior whereas the latter theory projected that behavior is not entirely under control thus an intended act (Ajzen, 1991). Ajzen (1991) explained that Theory of planned behavior model deliver a best explanation of consumers behaviour model that an individual is expected to achieve various behaviour if that individual has real control over the behaviour. Therefore, when an individual has a more satisfactory attitude, and with the acceleration of perceived behavioural control, that specific individual will achieve the real behaviour. In this model, behavioural views are predictable to impact attitude, so as the influence of normative opinions on the subjective norms through control, views establish the basis of behavioural control. Thus far, the association between these aspects has continued to be unclear (Ajzen, 1991). This theory is a vital idea as it delivers an association between attitudes and behaviour and helps to understand how can change the behaviour of

individuals. Therefore, this theory will be supportive in understanding how consumer changes their behaviour to shop online than physical store acquisitions.

The theory of planned behaviour applied to Taiwan customers disguised that the intent to shop online was most likely to be influenced by perceived risk and perceived uncertainty, the entirety of the attitudes of the individuals adjacent to them (Chen and Zimitat, 2006). Subsequently, these two factors can impact consumers' buying intention, therefore impacting their behaviour towards online shopping and ultimately leading to real deeds (Chen and Zimitat, 2006). The shopping intention as a supernumerary for buying behaviour also desires to be discovered. Though intention has been examined as a striking forecaster of real behaviour in shopping online (Roca et al., 2009), it should be recognised that buying intention does not interpret into buying action (Kim, 2006). Al-maghrabi et al. (2011) applied this theory in online shopping behaviour research and found that consumer trust is a predictor of consumers' buying behaviour in the retail industry. Based on this theory, perceived ease of use and perceived trust examined the online consumers' decisions in online shopping (Hu et al., 2009). Caulfield (2012) argued that online stores should comprehend the customers' buying behaviour in order to shape and preserve the respectable association with clientele and recommended to further investigation on the relationship between factors and online buying behaviour in future studies.

2.3 Factors Influencing Consumer's Online Buying Behavior

Consumers' behaviour is impacted for a variety of reasons, and the pandemic situation is one such reason. The growing of COVID-19 cases and its outcomes, including quarantine, seclusion, social distancing, and community repression, has influenced not only the behaviour of individuals toward well-being but also their buying behaviour (Islam, 2020). Individuals in lockdown were ordering online more often than usual, which has also reduced their flexible costs, became more discriminatory and shifted to local products (Khan, 2020). Besides, online shopping allows customers to contact more evidence associated with goods and services that support them to liken both value and product excellence with other manufacturers some other factors, including risk, uncertainty, security, validity, and trust, are the most significant aspects that influence consumers online buying behaviour (Salehi et al., 2012; Kloppers, 2014). Normally, consumers can be talented to contract any data and information simply via the internet (Ahmed et al., 2007).

Wang et al. (2005) directed an empirical study on online shopping and found that the product variety and trust had a noteworthy impact on customers' minds to buy online. Lui et al. (2017)

found that the main significant aspects of customers' online buying behavior are low perceived risk and website quality. Azzam and Fattah, (2014) found that consumers behaviour towards online shopping is not only influenced by the ease of use and perceived usefulness but also by exogenic aspects such as situational aspects, product variety, preceding online shopping involvements, and trust in online shopping. Similarly, Lakshmanan (2016) found in an empirical study that product preferences, risk perception and trust are the aspects that influence customers' behaviour towards online shopping. In contrast, Jasur and Haliyana (2015) and Szymanski and Hise (2000) found that financial security of the transactions, convenience and site design are the most significant aspects influencing on consumers' online buying behavior. Diallo et al. (2013) found that perceived price, and product category are significantly affected on consumers online buying behavior. According to Kim & Lim (2001), entertainment, convenience, consistency, trust, information excellence and perceived usefulness plays significant part in customer behavior while online shopping.

Hence, there are numerous factors that influence on consumers behavior while online shopping discussed above, but researchers have selected three aspects including perceived risk, trust and product variety that are considered more debatable factors of consumers' online buying behaviour in literature. These aspects discourse below in the light of preceding literature to construct the hypotheses and to develop the conceptual framework for the current study.

2.4 Research Variables

In the current study, three independent variables including perceived risk, trust and product variety are taken as independent variables while consumers online shopping behavior is taken as dependent variable.

2.4.1 Consumers Online Buying Behavior

Online shopping is mainly a procedure of retailing and purchasing of products and services on World Wide Web. Liu et al. (2017) discussed that internet shopping had become the fastest-growing segment in this modern business world. Due to the covid-19 pandemic, the online shopping trend among consumers has increased tremendously (Shariff et al., 2021). The term consumer buying behaviour in business refers to the online or offline actions of customers who recognise, interrogate, and determine which good or service to purchase before the real purchasing of a service or good (Dimiyati and Subagio, 2016).

Therefore, having a deep understanding about consumer buying behaviours and a decent hold of influencing this behaviour is relatively indispensable in the current day commercial setting as there is ruthless rivalry in numerous industries counting the e-commerce market (Shariff and Isah, 2019), as well as the outspread of the covid-19 pandemic, has also changed the consumer behaviour (Sumarliah et al., 2021). COVID-19 pandemic, social distancing and staying at home push the consumers toward online shopping. Consumers of all groups during the COVID-19 emergency were more expected to purchase goods and services online. Inclusive, there was a noteworthy shift toward e-commerce spending in all over the world including Malaysia (Armando, 2021). During covid-19 pandemic, various factors including sustained growth in the number of internet users, increased awareness of online shopping and low price due to bulk purchases, drive consumer behaviour (Ali, 2021). This increasing trend of consumers' online spending forces the organisations to emphasis critically on the characteristic of customer buying behaviour. Ramya and Ali (2016) highlighted that to effectively recognise the buying behaviour and recognise the actions of customers involved in their identification and decision-making procedure.

During the covid-19 pandemic situation in Malaysia, online shopping has taken extra consideration from customers. Thus, in case of ignorance of factors that impact on the online shopping behaviour of consumers during this pandemic in Malaysia, a critical understanding of consumer behaviour in the online setting cannot be comprehended. Numerous researchers (Xayrullaevna et al., 2020; Ismagilova et al., 2020) projected that online shopping is pointedly diverse from the traditional shopping setting. It is indispensable to distinguish the important aspects influencing customers' online shopping behaviour during Covid-19 in Malaysia. In the current study, the researchers have tried to sort out different characteristics that influence on consumers' online buying behaviour during a covid-19 pandemic to fill the gap in the existing literature.

2.4.2 Perceived Risk

The quantity of risk perceived by the customer is a purpose of two key aspects, namely, the amount at stake in the buying decision, and the person's sensation of particular inevitability that he/she will "win" or "lose" all or some of the quantity at stake (Abrar et al., 2017). It is also defined as the vagueness of bad consequence that customers may make when making buying choices (Naovarath & Juntongjin, 2015; Safie, Dastane, & Ma'arif, 2019), and, possibility of being dissatisfied when purchasing a product compared to the buyer's goal (Saprikis, Chouliara, & Vlachopoulou, 2010). Perceived risk is a dimension of surprising

dissatisfaction and displeasure with acquisition decisions based on the buying target, and henceforth it is a robust indicator of consumer behavior because customers are more likely to diminish possible catastrophes rather than seek the buying achievement (Haider & Nasir, 2016). In overall, dynamic online shopping behavior will consequence in the accomplishment of e-commerce dealings (Naovarat & Juntongjin, 2015).

2.4.3 Trust in Online Shopping

Trust has been described as “self-assurance in or reliance on some excellence or characteristic of an individual or object, or the truth of a statement” (Gong, 2009). It is “a confidence or sureness in the morality, honesty and dependability of trustee”. It has also been described in contexts of “interrelationship between two or more parties” (Choi et al., 2011); “readiness to receive susceptibility, but with a belief or confidence that one can trust on the other party” (Javalgi et al., 2005). A multi-faceted confidence that includes reasoning, expressive and behavioral extents (Choi et al., 2011), the content has been described with changing viewpoints and clarifications, depending on the perspective and background of the research. Trust contains as its contents, both believing opinions and trusting purposes (Javalgi et al., 2005; Gong, 2009). Exact to the ground of advertising, it has been extensively pragmatic in the perspective of physical store arrangements, and it is today extensively investigated and deliberated in the non-store arrangements. Though study on trust in online buying is ongoing, such efforts are under-researched, particularly in the Malaysian setting.

2.4.4 Product Variety in Online Shopping

Consumers’ values from construction a platform upsurge with levels of product variety. Therefore, producers’ profits from linking the platform upsurge with the number of customers that have accepted it (Katawetawaraks and Wang, 2011). The more groups that there is, the more striking the platform is. In other words, customers are varied for their readiness to pay for products and facilities (Karthikeyan, 2016). Though, the handling costs of product variety upsurge with the number of product groups (Kuriachan, 2014), due to the impacts of diseconomies of choice. The advanced variety level often experiences higher peripheral diversity charges, which leads to the high costs to increase the variety. Platform possessors essential to stability product variety and organization costs of groups to exploit their returns. There is a wide literature on dealing product variety (e.g., Muthumani et al. (2017; Smith and Agrawal (2013); Karthikeyan (2016)). These studies emphases on the ideal list level. However,

the current study focus is on the product variety influence on consumers online buying behavior.

2.5 Hypotheses Development

Literature pointed out the importance of perceived risk, trust and product variety influence on consumers buying behaviour but there are inconsistent results are found.

2.5.1. Product Variety and Consumer's Online Buying Behavior

Bai et al. (2011) found a direct and positive impact of product variety on consumers' buying behaviour during online shopping. In contrast, Jasur and Haliyana (2015) found no direct relationship of product variety and consumers' buying behaviour in online shopping. According to Dhanapal et al. (2015), consumers can equivalence goods, brands, prices, and customers' assessments and make acquisitions simply anywhere and anytime, through practically limitless and variabilities of product choices, which is one of the most significant motives to purchase products online. Contrary, Bhatti et al. (2021) found that the reason for the usage of online shopping was not due to the accessibility of varieties of products they could select from the online store. Hence, there is a debate among researchers about product variety's significant influence on customers buying behaviour towards online shopping. Thus, the planned hypothesis is as follows:

H1: There is a significant relationship between product variety and consumers' buying behaviour during online shopping.

2.5.2. Perceived Risk and Customer Buying Behavior in Online Shopping

According to Alalwan (2018), perceived risk is predictable to be more discrete in online shopping equated to face to face shopping and most likely impacts on consumers' online buying behaviour. In online shopping, perceived risk can be compact in contexts of suitable explanations of the goods. According to Afridi et al. (2021), low perceived risk in online shopping has shown to have a strong and positive impact on consumers' buying behaviour. In contrast, Chavadi et al. (2021), online shoppers perceive various risks in online shopping, and these perceived risks may not significantly impact online consumers buying behaviours. Andrews (2012) found an inverse relationship between perceived risk and consumers' buying behaviour in online shopping. In contrast, Juniwati (2014) found that perceived risk has a significant impact on consumers' buying behaviour towards online shopping. This debate showed inconsistent results of perceived risk relationship with online buying behaviour of consumers; therefore, the planned hypothesis is discussed as below:

H2: There is a significant relationship between perceived risk and customers' buying behaviour during online shopping.

2.5.3. Trust and Consumer's Online Buying Behavior

Literature pointed out that trust is considered an important factor in online consumers' buying behaviour (Hicintuka & Öven, 2020). The growing dearth of trust from virtual consumers is a delinquent faced by online service workers. The subtleties of the association between consumer trusts that have the ultimate significance on the trust choices are still an encounter for investigators in the arena of e-commerce (Lăzăroiu et al., 2020). There have not been many studies investigating this, particularly between trust and buying behaviour. The construction of trust for virtual customers is an imperative thing in building an auctions system from e-commerce (Chen and Huang, 2020). According to Leeraphong and Mardjo (2013), trust plays an important role in explaining the behaviour of online consumers. While Azzam and Fattah (2014) found that there is no significant relationship between trust and online buying behaviour. Consumers who believe in the services delivered online definitely assume to get virtuous quality and sure security. Based on the above discussion, the hypothesis is proposed as follows:

H3: There is a significant relationship between trust and consumers' buying behaviour during online shopping.

2.6 Conceptual Framework

The stimulus-response model by Kotler (1997) of consumer behaviour is valuable to comprehend the buying behaviour of distinct customers in the setting of persons buying consumer goods. The model concisely puts forward those distinct consumers are visible to advertising stimuli such as product, price, trust, place, and promotion, and consumers are also showing to other stimuli in the marketing environment that comprises economic, technological, political and cultural features. The purchaser's mental procedures are envisaged as a black box, and the explanations are of purchaser decisions. In this research, perceived risk, trust and product variety in online shopping are stimuli and consumers' buying behaviour is the response. If the consumers will receive less perceive risk such as to attain an excellence products or services while in online shopping could enhance the buying intention of the consumers. similarly, trust and product variety will act as a stimulus such as consumers trust on products

and services as well as received a variety of brands will leads them towards response (buying behavior).

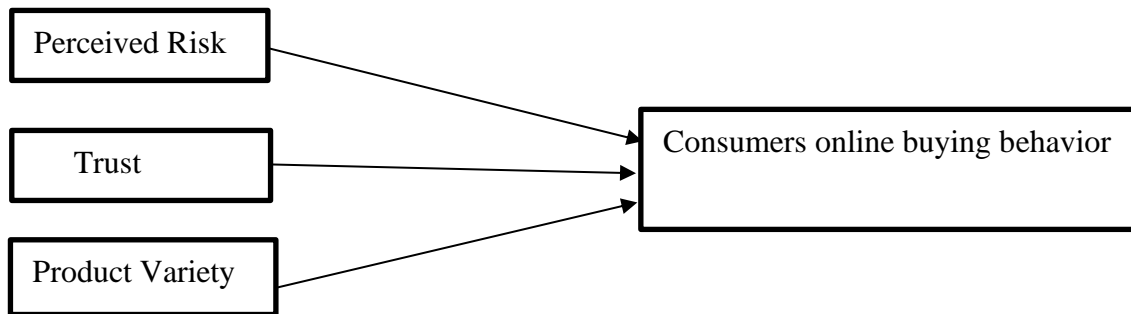


Figure1: Conceptual Framework of Consumers' online buying behaviour

2.6 Chapter Summary

In current chapter, past studies based on consumers online buying behaviour, covid-19 impact on consumers choice and factors impact on consumers online buying behavior was critically discussed. theories related to consumer behavior are discussed in detail and hypotheses are build based on previous studies discussion. Finally, the conceptual framework is presented. in next chapter research methodology for this study will be discussed in detail.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This specific chapter will be related to the aspect of the depiction of the methods which will allow the understanding of the process of the collection of information regarding the critical assessment of the influence of the pandemic on the consumers' shopping behaviour and needs in the country of Malaysia with respect to the case of KL section of the country. Moreover, justification for all the choices made for the options will be stated here as well, along with the method for the analysis of the data.

3.2 Research design

The quantitative research method is adopted in current research as the nature of research is quantitative, where quantifiable data will be analysed (Saunders et al., 2007). This approach is adopted to measure the factors (perceived risk, trust, and product variety) influence on consumers buying behaviour towards online shopping. Henseler et al. (2014) pointed out that a quantitative based approach is more adequate for numerical based data studies. Additionally, positivism philosophy is considered in the current study as Hu and Bentler (1999) pointed out that this philosophy is more suitable for quantitative research where data is statistically analysed. This philosophy mainly replicates the logical attitude of a normal scientist and implements the studies which are originated from causal relationships. The present study is also based on the causal relationship between factors (perceived risk, trust, and product variety) and consumers' online buying behaviour. Ghani and Jan (2010) pointed out that the deductive approach is more appropriate for positivism philosophy and for testing of prevailing theory. The present research is also grounded on prevailing theory (SR) and the Theory of planned behaviour. Thus, the deductive approach is adopted in the current study. Saunders et al. (2009) suggest numerous study strategies counting experiments, surveys, case studies and action research. A survey research strategy is adopted in the current study, where a questionnaire will be applied to gather data from online customers in Malaysia.

3.3 Sampling Procedures

3.3.1 Sampling Technique

To attain significant and main objectives of this study, the researcher has formalised non-sampling technique to gather essential data from the valid number of the sample selected from the population. In addition, non-probability sampling is used due to the absence of a sampling

frame (a whole list of the target population). In non-probability sampling, convenience sampling is adopted, which is a more suitable and cost-effective way of data collection (Saunders et al., 2016).

3.3.2 Sampling Population and Unit of Analysis

The population of this study are the internet user in Malaysia. At the target population stage, the researcher will have to include customers who are continually shopping online during Covid-19 only at Kelang Valley divisions in Malaysia. The researcher will select both male and female consumers based on different classes, including age, occupation, and income. However, the sample size depends on the researcher's recognised significance level and the predictable confidence interval. The unit of analysis of this study is online shopping business in Malaysia.

3.3.3 Sample Size and Sample Area

In contexts of sample size, the total internet users in Malaysia are about 26 million, however, due to covid-19 pandemic condition the online shopping trend has increased by 10.6% (E-commerce Malaysia, 2021). According to Cohen (1972) Table, with the population above 10 million sample sizes will be 383 with the 5% margin error. However, only 327 usable questionnaires were obtained that used as final sample size. Kelang Valley is selected as the sample area of the study as more internet users are belongs to this area (Statistical Department Malaysia, 2020).

3.4 Data Collection Method

The researcher will collect the primary data that directly impacts the buyers' online shopping behaviour during Covid-19 in Malaysia, where an instrument such as a questionnaire will be used for data collection that is measured as the best data collection technique for quantitative research (Hair et al., 2011). The questionnaire is intended on Google Form with understandable language so that the respondents can easily understand the questions (Brislin, 2010). All variable items of the questionnaire are measured on 5-point Likert scale (1 strongly disagree to 5 strongly agree) and circulated through WhatsApp, mail and face to face where necessary. In the current study, a structured questionnaire is organised to attain the consumers' perception of the aspects impacting the customers' online shopping behaviour in Malaysia. The questionnaire is divided into two segments including the demographic part, where respondents' personal information will be obtained, and in the next section, variable questions will be designed.

3.5 Research Instrument

The current study is prepared to recognise the main aspects that lead to influencing consumers' online shopping behaviour in Malaysia. There are two kinds of variables considered for this study, including independent and dependent variables. Independent variables have consisted of perceived risk is, measured by 4 items approved by Andrews et al. (2007), trust, measured by 3 items from Cheung and Lee (2001) and product variety by 3 items from Cheung and Lee (2001). Consumers' online shopping behaviour is measured as the dependent variable measured with 3 items adopted from Andrews et al. (2007) in the current study. Thus, the researcher has selected three independent and variables regarding aspects influencing purchasers' online shopping behaviour during Covid-19 in Malaysia.

3.6 Data Analysis Techniques

Collecting data will be analysed through SPSS (statistical package for social sciences), where two analysis techniques will be utilised descriptive and inferential. This analysis goals to find the predictors of customers' online shopping behaviour during covid-19 in Malaysia. In the descriptive part, respondents' information will be analysed through frequency distribution, level of factors such as perceived risk, trust, product variety, and consumers' online buying behaviour will be measured through mean and standard deviation to present a more vivid picture of the study. Before conducting inferential analysis, a reliability test will be carried out to check the consistency of the data collection instrument. Subsequently, in the inferential statistical part, correlation and a multiple regression model will be used to study the association between selected variables and stipulate the best predictors of online consumers' buying behaviour, respectively. The multiple regression model for this study is presented as below:

$$Y = b_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3$$

Here, X_1 = product variety; X_2 = trust; X_3 = perceived risk; Y = Customers' online shopping behaviour and b_0 is constant.

3.7 Summary of Chapter

In the current chapter, the researcher has discussed the research design, sampling techniques, data collection method and data analysis techniques, respectively. Quantitative research approach was adopted in this research which is discussed with justification in this chapter of the research. Quantitative research methodology is adopted because the current research is

based on primary quantifiable data where this methodology is more suitable. In addition, positivism philosophy and deductive approach were used in this study which also explained with the justification in current chapter. In contexts of time horizon, cross sectional horizon is discussed where data is collected one time. Further, non-probability sampling technique was used to collect data because there is no sampling frame available as the list of online consumers is difficult to obtain. In non- probability sampling, convenience sampling was taken which is also discussed in the current chapter. Subsequently, the population and sample size of the study is discussed where the population of this study are the internet users and sample population is the internet users who preferred online shopping. In the upcoming chapter, collected data will be analysed in the light of selected research methods.



CHAPTER 4: RESULTS & DISCUSSION

4.0 Chapter Introduction

The current section of the research is conducted to present the findings of analyzed data to provide the answers to research questions and hypothesis. This research is basically quantitative-based where data is collected from online consumers through questionnaire during covid-19 pandemic in Malaysia. However, total of 380 questionnaires distributed to target population and only 327 usable questionnaires are used for final analysis. Thus, the sample size for this study is 327. This chapter deals with demographic information, descriptive analysis, and inferential analysis. Reliability test was also conducted to confirm the internal consistency of the collected data. In demographic part, respondents' information was calculated through frequency and percentage and presented in tabulation form. In addition, respondents' involvement in online shopping information was also presented in this part of the analysis. In descriptive analysis part, the measurement level of the study constructs was calculated through central tendency measures to give the answer of research objective 1 of this study. Subsequently, inferential analysis was carried out where correlation and regression analysis were carried out to justify the hypothesis of this study. the measurement level of the constructs was analyzed through the statistical measure of mean and standard deviation distribution.

4.1 Demographic Analysis

In this part of the analysis, respondents' information was calculated and presented in Table 1 and Table 2. Various demographic constructs were taken in this study such as gender, material status, age, profession, and income level of the respondents. These aspects were analyzed through frequency distribution to differentiate the online consumers in the perspectives of demographic segmentation.

Respondents' information results were demonstrated in Table 1 which indicates that total of 327 respondents participate in this survey where 171 (52.3%) male and 156 (47.7%) female respondents gave their responses. These findings showed that more male consumers were engaged with online shopping during covid-19 pandemic period in Malaysia. The next category was related to the age group of respondents which indicates that 121 with 37.0% of respondents are lie between the age group of 21-30, 104 with 31.8% are between the age of 31-40, and 52 with 15.9% of respondents are 41 and above years old. The highest percentage of online shopping consumers ranges from the age of 21 to 30 years specifies that the consumers with

this age are more familiar and engaged with the online shopping in Malaysia during pandemic era. The findings also showed that most of the respondents (171; 52.3%) were married and 156 (47.7%) respondents were single. These findings indicates that married consumers were more involved in online buying during pandemic period in Malaysia.

In contexts of profession, employee-based respondents were higher (121; 37.0%) in this study. However, 101 with 30.9% entrepreneur, 59 (18.0%) students and only 46 (14.1%) overseas Malaysian's respondents were participated in this study. These findings showed that employees who are doing private or government jobs were more involved in online shopping during pandemic condition in Malaysia. Subsequently, income category results indicates that 105 with 31.5% respondents were earning RM4001 to RM5000 per month, 102 (31.2%) respondents salary lies between RM3001 to RM4000, 73 (22.3%) respondents earning was RM5001 and above and only 49 (15%) respondents were earning RM3000 and below. These findings showed that most of the respondents with income level RM4001 to RM5000 were more familiar with online shopping during covid-19 situation in Malaysia.

Table 1: Respondents Profile

| Constructs | Frequency | (%) |
|-------------------------------|------------------|------------|
| <u>Gender</u> | | |
| Female | 156 | 47.7 |
| Male | 171 | 52.3 |
| <u>Age</u> | | |
| 20 and below | 50 | 15.3 |
| 21-30 | 121 | 37.0 |
| 31-40 | 104 | 31.8 |
| 41 and above | 52 | 15.9 |
| <u>Material Status</u> | | |
| Married | 171 | 52.3 |
| Single | 156 | 47.7 |
| <u>Profession</u> | | |
| Student | 59 | 18.0 |
| Employee | 121 | 37.0 |
| Entrepreneur | 101 | 30.9 |
| Overseas Malaysian | 46 | 14.1 |

| <u>Monthly Income</u> | | |
|------------------------------|-----|------|
| RM3000 and below | 49 | 15.0 |
| RM3001-RM4000 | 102 | 31.2 |
| RM4001-RM5000 | 103 | 31.5 |
| RM5001 and above | 73 | 22.3 |

N=327

In Table 2, the results of respondent's perception about online shopping are demonstrated. The findings showed that all respondents (327; 100%) were engaged in online shopping during pandemic era in Malaysia which meets the criteria of participants selection for this survey. In context of online shopping frequently, most of the customers (120; 36.7%) buy goods/services on regular bases through online channels during the time of covid-19 in Malaysia. 101 with 30.9% customers buy the products/services once a week, 76 (30.2%) customers used online shopping twice a week and only 30 (9.2%) customers buy online monthly or when necessary, during the covid-19 condition in Malaysia. These findings showed that during covid-19 time, the regular online shopper was more in the country.

In addition, most of the customers (162; 49.5%) purchase convenience products such as snacks, vegetables, bread, and other eatable goods while in online shopping during the pandemic time in the country. However, 91 (27.8%) customers prefer to buy shopping good and only 74 (22.6%) prefer to buy specialty products while in online shopping during covid-19 situation in Malaysia. Subsequently, Lazada (123; 37.6%) was preferable online shopping platform in Malaysia during covid-19 situation. While, 98 (30%) customers prefer Amazon, 86 (26.3%) used shoppe and only 20 (6.1%) indicated the other online mediums such as Grab delivery and Food panda during the pandemic condition in Malaysia. These findings showed that Lazada is more familiar online shopping centre for the customer in Malaysia.

Product variety (118; 36.1%) was marked as most important criteria of online shopping by customers during covid-19 situation in Malaysia. However, perceived risk (99; 30.0%) highlighted as second important criteria while trust (49; 15%) was a least criterion for customers in selection of online shopping during covid-19 situation in the country. Finally, 61 customers with 18.7% preferred other criteria including brand image, advertising, product review and others. These findings showed that Malaysia consumers gave more importance to the product variety while in online shopping during covid-19 situation. Additionally, online

consumers faced some problems including poor customer services (88; 27.0%), damaged products (79; 24.1%), wrong products/services delivery (71; 21.7%) and unhygienic delivery (69; 21.1%) while in shopping during covid-19 situation in Malaysia. These findings showed that most of the Malaysian customers were faced poor customer service including delivery not on time, high prices of delivery and, staff behavior during the pandemic situation. They also faced the problems of unhygienic delivery of products such as no mask and gloves used by employees, and fear of unhygienic packaging of service providers.

Table 2: Respondents Involvement in Online Shopping

| Items | Frequency | (%) |
|--|-----------|------|
| Do you prefer to buy products/services through online channels during the pandemic time? | | |
| Yes | 327 | 100 |
| No | - | - |
| How frequently do you purchase products/services via online medium during the pandemic period? | | |
| Regularly | 120 | 36.7 |
| Once a week | 101 | 30.9 |
| Twice a week | 76 | 30.2 |
| Others | 30 | 9.2 |
| What kind of products do you prefer to purchase via online medium during covid-19? | | |
| Shopping goods | 91 | 27.8 |
| Convenience goods | 162 | 49.5 |
| Specialty goods | 74 | 22.6 |
| Which online shopping medium do you think is the best use in Malaysia? | | |
| Amazon | 98 | 30.0 |
| Shopee | 86 | 26.3 |
| Lazada | 123 | 37.6 |

| | | |
|--|-----|------|
| Others | 20 | 6.1 |
| Important criteria in online shopping | | |
| Perceived Risk | | |
| Product Variety | 99 | 30.3 |
| Trust | 118 | 36.1 |
| Others | 49 | 15.0 |
| | 61 | 18.7 |
| Problems faced in online shopping during pandemic. | | |
| Damaged Products | 88 | 27.0 |
| Poor Customer Services | 79 | 24.1 |
| Wrong products/services | 71 | 21.7 |
| delivery | 69 | 21.1 |
| Unhygienic Delivery | 20 | 6.1 |
| Others | | |

N=327

4.2 Reliability Test

Cronbach's alpha (α) measurement was used to check the reliability/internal consistency of the data which is considered as the most common use measure of reliability. According to Hair et al. (2012), the value of α should be equal to or greater than 0.70 to ensure the consistency of data. indicate. The value less the 0.70 indicates no reliability and problem in instrument. A reliability score equal or greater than 0.70 but less than 0.8 showed that the construct is reliable at satisfactory level, the value equal or greater than 0.80 indicates that data is highly reliable.

The findings of reliability of this study are demonstrated in Table 3 which indicates that all constructs value is greater than 0.70 showed internal consistency of the data. Product variety (0.812) and online buying behavior (0.801) showed high internal consistency while trust (0.771) and perceived risk (0.790) showed internal consistency at satisfactory level.

Table 3: Reliability Findings

| Constructs | Items | α value |
|------------------------|--------------|----------------------------------|
| Product Variety | 3 | 0.812 |
| Trust | 3 | 0.771 |
| Perceived Risk | 3 | 0.790 |
| Online buying behavior | 4 | 0.801 |

N=327

4.3 Descriptive Analysis

The measuring level of all selected construct items is discussed in this part of analysis. The measuring level of construct items is calculated through mean and standard deviation. A 5-point Likert scale was used to measure the items of all selected constructs. The obtained results are presented in Table 4. Hair et al. (2012), gave the interpretation criteria of mean give as below:

Mean value between 4.21 and 5.00 - very high,

Mean value between 3.41 and 4.20 - high,

Mean value between 2.61 and 3.40 - moderate,

Mean value between 1.80 and 2.60 - low

Mean value between 1.00 and 1.80 - very low.

However, the significance of online shopping cannot underestimate during lockdown condition due to covid-19 situation. Various aspect such as perceived risk, product variety and trust are considered as important elements by the consumers of online shopping in this study. The findings of Table 4 indicates that the consumers were not agreed that they got what they ordered through online platform during pandemic situation in Malaysia (Mean=2.55; S.D=.513), they did not receive malfunctioning merchandise from online channels during pandemic situation (Mean=2.57; S.D=.519) and they also moderately agreed that it was easy to judge the quality of products/services over online platforms during covid-19 pandemic situation (Mean=2.69; S.D=.519). These results specify that the perceived risk of customers is high in Malaysia while in online shopping and the online platforms are still underdeveloped which needs improvement to build the confidence of consumers on online shopping.

Product variety results showed that the respondents were highly agreed that they found a variety of products readily available at online stores during covid-19 situation in Malaysia (Mean= 3.81; S.D= 0.501), they moderately agreed that they can obtain different brands with variety of products in online shopping stores during covid-19 pandemic situation in Malaysia (Mean= 3.40; S.D= 0.632) and the respondents agreement level was low that they found different brand products with different price ranges from cheap to expensive in online shopping stores in Malaysia during covid-19 pandemic condition (Mean= 3.22; S.D= 0.505). These results specify that online stores in Malaysia are offering product variety at a satisfactory level. However, online channels in Malaysia should have to upsurge the brand products variety with different price ranges through a partnership with well reputed brands.

Trust play a vital role in online shopping (Gefen et al., 2003).The results of this study showed that the respondents were moderately agreed that they believe that the online stores are trustful in its dealings with them during pandemic situation in Malaysia (Mean= 3.14; S.D= .629), they were prepared to give private information to online stores websites/channels during covid-19 pandemic condition in Malaysia (Mean= 3.94; S.D= 0.720), and they also moderately agreed that they were willing to give their credit card number to online channels sites during covid-19 situation in Malaysia (Mean= 2.81; S.D= 0.601). These findings specify that the online shopping channels in Malaysia are not highly trustworthy for Malaysian consumers.

Additionally, in contexts of online buying behavior, the results showed that the respondents were highly agreed that online shopping is vital for them especially during covid-19 condition in Malaysia (Mean= 4.07; S.D= .578), they also agreed that the online buying trend will increase in future due to low perceived risk (Mean= 4.04; S.D= 0.619), online buying is more convenient and trustworthy during the condition of covid-19 in Malaysia (Mean= 4.01; S.D= 0.538) and their agreement level was low that they got variety of products with best quality and price in online shopping during the Covid-19 situation in Malaysia (Mean= 3.09; S.D= 0.699). These findings specify that the trend of online buying is increasing in Malaysia due to the pandemic situation, therefore online stores should have to emphases on the products variety, safety, and brand image to attract more customers.

Table 4: Measurement Level of Study Constructs

| Constructs | SPSS Coding | Mean | SD |
|------------|-------------|------|----|
|------------|-------------|------|----|

| | | | |
|--------------------------------|------|------|------|
| Perceived Risk | PR1 | 2.55 | .513 |
| | PR2 | 2.69 | .519 |
| | PR3 | 2.57 | .611 |
| Product Variety | PV1 | 3.40 | .632 |
| | PV2 | 3.22 | .505 |
| | PV3 | 3.81 | .501 |
| Trust | T1 | 2.81 | .601 |
| | T2 | 3.00 | .524 |
| | T3 | 3.14 | .629 |
| Online buying behavior (DV) | OBB1 | 4.01 | .538 |
| | OBB2 | 4.04 | .619 |
| | OBB3 | 3.09 | .699 |
| | OBB4 | 4.07 | .578 |

N= 327 5- Likert Scale

4.5 Pearson Correlation Analysis

To check the relationship between two variables, Pearson correlation is used. In this study the factors such as product variety, perceived risk and trust relationship with online buying behavior was checked separately. Correlation (r) values basically lies between -1.0 and +1.0. Losh (2004) gave the criteria of correlation presented as below:

r = 1 - Perfect,

r = 0.76 to 0.99 - Very strong,

r = 0.51 to 0.75 - Strong

r = 0.26 to 0.50 - Moderate

r = 0.11 to 0.25 - Weak relationship

r = 0.01 to 0.10 - No relationship

The findings of correlation are displayed in Table 5, Table 6, and Table 7 respectively.

Table 5: Correlations between Online Buying Behavior and Perceived Risk

| | | Online Buying Behavior | Perceived Risk |
|------------------------------|---------------------|---------------------------|-------------------|
| Online Buying Behavior | Pearson Correlation | 1 | -.312** |
| | Sig. (2-tailed) | | .000 |
| | N | 327 | 327 |

| | | | |
|----------------|---------------------|---------|-----|
| Perceived Risk | Pearson Correlation | -.312** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 327 | 327 |

** . Correlation is significant at the 0.01 level (2-tailed).

Table 5 showed the findings of correlation between perceived risk and online buying behavior of customers which indicates a negative and moderate (-.312**) relationship between these two variables during the covid-19 time in Malaysia. These results specify that perceived risk such as fraud, low quality products delivery, and poor delivery process of online merchandise could decrease the buying behavior of customers in Malaysia.

Table 6: Correlations between Online Buying Behavior and Product Variety

| | | Online Buying Behavior | Product Variety |
|------------------------|---------------------|------------------------|-----------------|
| Online Buying Behavior | Pearson Correlation | 1 | .390** |
| | Sig. (2-tailed) | | .000 |
| | N | 327 | 327 |
| Product Variety | Pearson Correlation | .390** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 327 | 327 |

** . Correlation is significant at the 0.01 level (2-tailed).

The results of correlation between product variety and online buying behavior is demonstrated in Table 6 specify a moderate and positive relationship between these two variables ($r = .390^{**}$; $p = .000$). These findings indicate that product variety including the availability of diverse brand products with diverse prices and quality in online stores would increase the buying behavior of online consumers in Malaysia. Therefore, online stores should have to concentrate on diverse brand variety to raise the buying behavior of consumers in the country.

Table 7: Correlations between Online Buying Behavior and Trust

| | | Online Buying Behavior | Trust |
|------------------------|---------------------|------------------------|--------|
| Online Buying Behavior | Pearson Correlation | 1 | .449** |
| | Sig. (2-tailed) | | .000 |
| | N | 327 | 327 |
| Trust | Pearson Correlation | .449** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 327 | 327 |

** . Correlation is significant at the 0.01 level (2-tailed).

Table 7 demonstrates the findings of the correlation between trust and online buying behavior of consumers which indicates that there is a moderate and positive relationship between trust and online buying behavior of Malaysian consumers ($r = .449^{**}$; $p = .000$). These results demonstrate that trust such as surety of product quality, warranty and personal information could increase the buying behavior of consumers.

4.6 Linear Regression Analysis

Before conducting linear regression analysis, it is important to check the data suitability through multicollinearity tests. In Table 9, the results of multicollinearity showed that tolerance value and variance inflation factors (VIF) were attained to recognize any multicollinearity delinquent. According to Tabachnick and Fidell (2001), tolerance value of less than 0.1 displays multicollinearity is an unruly and according to Hair et al. (2006) if VIF value is more than 10.0, the constructs are interpreted as highly correlated and multicollinearity is existing. The below Table 9 shows that all the tolerance values ranged is from 0.471 to 0.731 which specifies multicollinearity is not a problem. Likewise, the values ranging from 1.181 to 2.124 indicates that variance inflation factor (VIF) are low which stipulates that collinearity is not an issue.

Table 9: Collinearity of Independent Constructs in Multiple Regression Analysis Model

| Collinearity Statistics | | |
|-------------------------|-----------|-------|
| | Tolerance | VIF |
| Perceived risk | .731 | 1.181 |
| Product variety | .635 | 1.537 |
| Trust | .471 | 2.124 |

Linear regression analysis was conducted to check the influence of independent aspects (perceived risk, product variety, and trust) on the dependent variable (online buying behavior). This test is basically carried out to check the quality of fit of the model examined by multiple correlation coefficients and the coefficient of determination. In this part of the analysis, hypothesis was answered through the examination of the regression coefficients (beta). Three tables were obtained after carry out this test. These results are demonstrated in Table 9 (Model summary), Table 10 (ANOVA) and Table 11 (Coefficient).

Table 9: Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .453 ^a | .408 | .407 | .12314 |

a. Predictors: (Constant), Perceived Risk, Trust, Product Variety

Model summary results are shown in Table 8 which indicates that $R^2 = 0.408$ indicates that the model is the best fit. It showed that independent variables (perceived risk, product variety, and trust) explain about 40.8% of the variance in online buying behavior. Adjusted $R^2 = .407$ designates less variance with the obtained R^2 .

Table 10: ANOVA^a

| Model | | Sum of Square | df | Mean Square | F | Sig. |
|-------|------------|---------------|-----|-------------|--------|-------------------|
| 1 | Regression | 73.99 | 3 | 24.66 | 108.87 | .000 ^b |
| | Residual | 73.40 | 324 | .2265 | | |
| | Total | 147.39 | 327 | | | |

a. Dependent Variable: Online Buying Behavior

b. Predictors: (Constant), Perceived Risk, Trust, Product Variety

The results of ANOVA (see Table 9) indicates that the statistical value $F = 108.87$ with the value $\text{sig} = 0.000$ justifies that the regression model is suitable for the data set.

Table 11: Coefficients

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|-----------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2.122 | .084 | | 30.525 | .000 |
| | Perceived Risk | -.273 | .085 | -.252 | -3.553 | .001 |
| | Product Variety | .301 | .082 | .571 | 5.601 | .000 |
| | Trust | .206 | .084 | .461 | 6.213 | .000 |

a. Dependent Variable: Online Buying Behavior

The coefficient results are demonstrated in Table 11 which shows that all three independent variables (perceived risk, trust and product variety) are the predictor of online buying behavior of Malaysian consumers in Malaysian during covid-19 pandemic time. The results showed that

product variety ($\beta=.571$; $p=0.00 < 0.05$) is the stronger predictor of consumers online buying behavior. Perceived risk ($\beta= -.252$; $p=0.001 < 0.05$) was the third stronger predictor of online buying behavior of customers. Trust ($\beta=.461$; $p=0.00 < 0.05$) is the second highest predictor of the online buying behavior of customers in this study.

Regression Equation and Predicted Model

$$Y = \beta^0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3$$

$$Y = 2.122 - .252X_1 + .571X_2 + .461X_3$$

Where Y = Online buying behavior

β^0 = Constant

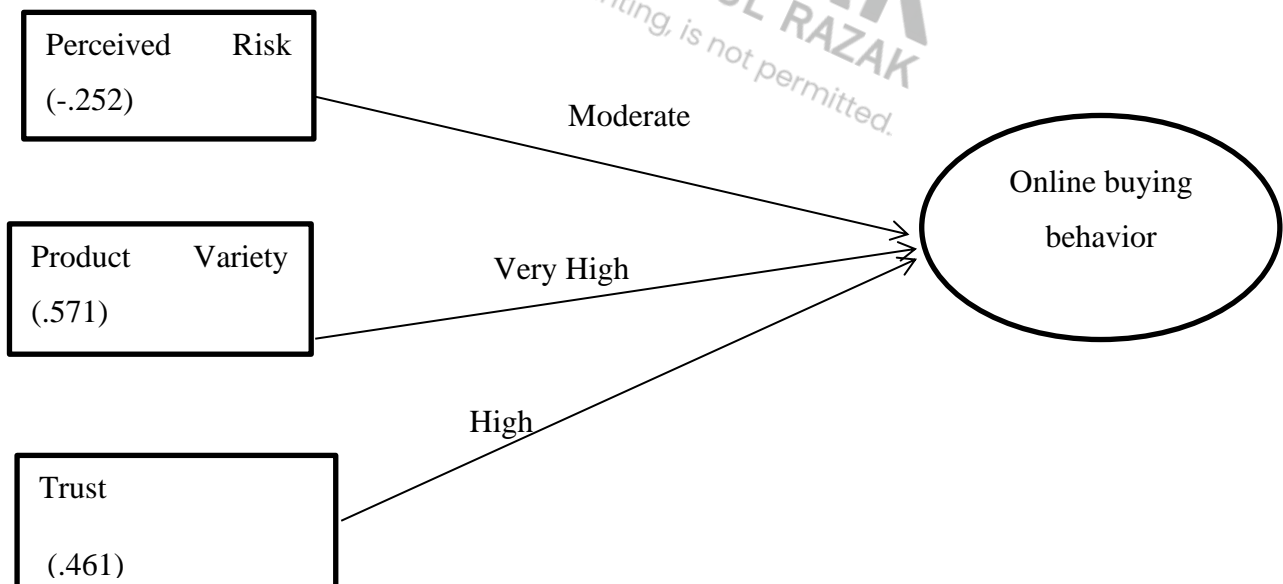
X1 = Perceived Risk

X2 = Product Variety

X3 = Trust

Independent Variables (X)

Dependent Variable (Y)



4.7 Hypothesis Results

The results of hypothesis are shown in Table 11 which shows that standardized coefficients of the all three variables where product variety ($\beta=.571$) and trust ($\beta=.461$) have a stronger influence on the consumers online buying behavior while perceived risk ($\beta= -.252$) demonstrated a negative and moderate influence on online buying behavior of consumers.

Table 12: Hypothesis Results

| Hypotheses | Regression | | | Decision |
|--|------------|-----------------------|------|-----------------|
| | B | Influence | Sig. | |
| H1: There is a significant relationship between perceived risk and online buying behavior | -.252 | Negative and moderate | .001 | Accepted |
| H2: There is a significant relationship between product variety and online buying behavior. | .571 | Positive and High | .000 | Accepted |
| H3: There is a significant relationship between trust and online buying behavior. | .461 | Positive and high | .000 | Accepted |

4.8 Chapter Summary

In this chapter, the researcher has discussed findings and results in detail. The results showed that all three independent variables (perceived risk, product variety and trust) are significantly associated with online buying behavior of customers. In next chapter, conclusion, recommendations and limitations are presented in detail.

CHAPTER 5: CONCLUSION and IMPLICATIONS

5.1 Introduction

This study was conducted on factors influence on consumer's online buying behavior during covid-19 situation in Malaysia. The current chapter of this thesis deals with the overall conclusion, implications, recommendations and limitations of the study. Three independent factors including perceived risk, product variety and trust influence on online consumers buying behavior was tested in previous chapter where all three variables found to be predictors of online consumers buying behavior in Malaysia. However, discussion of findings, implications, limitations & recommendations and conclusions are presented in following sections.

5.2 Discussion of the Findings

The main findings showed that all proposed hypothesis (H1, H2, and H3) are supported indicates that all three variables such as trust, perceived risk and product variety impact on consumers online buying behaviour in Malaysia during covid-19 situation. Product variety was found to be a stronger predictor of the consumer's online buying behavior. These findings are align with past studies such as Mason et al., (2020) found that variety of different brands in online stores is an important aspect of consumers online shopping behavior. Akter and Sultana (2020) found that lack of product varieties in online stores during covid-19 has negatively influence on consumers online buying behavior in Malaysia. Thus it is suggested to the online companies to contract with more reputed brands and offer variety of brands in online stores to enhance consumer's online buying behavior.

Trust was the second highest predictor of the consumers online buying behavior in this study. however, consumer trust such as safe/secure product delivery, secure payment methods, product quality and hygienic services of employees were very crucial for Malaysian online consumers during Covid-19 pandemic condition. These findings are supported by previous study such as Fatema and Siddiqui (2021) found that trust including payment method, product quality and safety positively impact on consumer's online buying behavior in Bangladesh. Thus, online companies should focus on the digital competences of their consumers and clearly identify where they need to gain their trust.

Finally, perceived risk also found to be a significant aspect of online buying behavior of consumers in Malaysia during covid-19 situation, however, perceived risk is negatively associated with online shopping behavior of consumers which indicates that high privacy issues and product delivery issues negatively influence on consumers online buying behavior. The health issue of delivery person also have negatively associated with online buying behavior of consumers as perceived risk of contamination affects the psychological and emotional attitude of online consumers. These findings are align with previous studies such as Kim et al. (2021) found that perceived risks during COVID-19 situation negatively impact on the buying behavior of online consumers and lead to changes in individual behavior and consumption patterns (Troise et al. 2021). Brewer and Sebby (2021) pointed out that the perceived risk and the threat of contagion influenced customer behavior variations, evolving a larger partiality for the use of technologies to communally distance themselves from humans.

Therefore, it can be concluded that the results of this study showed that the online shopping behavior has increased during covid-19 pandemic and factors such as trust, perceived risk and product variety impacts online shopping behavior, meanwhile, at this time, individuals fear being diseased when retrieving physical retail environments and find in the online setting the ease of being capable to contact this buying without having to consent the ease of their homes and depiction themselves to risk. Also, it is also potential to note that this instant of larger contact to digital media favors the development of online shopping because the customer who has an intent to purchase online most expected chooses to make such a buying.

5.3 Study Implications

This research gives theoretical, managerial, and social contributions. The findings of this study extend the theoretical understanding by clarifying the aspects of buying behavior of Malaysian consumers who will be potential customers in online business. From a theoretical point of view, this article contributes to the body of literature on online purchasing decisions. The rapid increased of the internet eliminates physical obstacles, opening a worldwide place of commercial. The outcomes of this study support that customers' purchasing behavior is significantly influenced by perceived risk, trusts and product variety in the pandemic situation. COVID-19 is a new disaster and is shifting the pattern of individual life. Mehta et al. (2020) pointed out that this novel pandemic has had a clear influence on the global economy, fluctuating socio-economic variations that transform customers' buying behavior.

Therefore, the online-marketers should emphasis on the health and safety actions at the delivery time to reduce the risk of contamination, provide trustable channels of online payment and also offer the variety of brands in online stores. In addition, before participating time and effort, executives must study customers' purchasing behaviors, the influence of the aspects on shifting behavioral forms, which may improve their information and considerate. Thus, the results of this research may guide marketers to imagine all segments of customers in Malaysia. Online-retailers may implement effective advertising approaches to relish competitive benefits over outmoded business perform. Akter and Sultana (2020) pointed out that marketers are facing encounters through digital advertising communication networks as customers' behavior has severely transformed due to lockdown and pandemic conditions.

Thus, from management perspective, the considerate of customer purchasing behavior in the use of the simulated setting to the disadvantage of face-to-face, particularly in this epidemic situation, to make their buying, it is vital for businesses and marketing specialists to reconsideration their planned activities concentrating on improved presenting, forecasting and rearrangement of their goods and services mainly the online network viewpoint. This study also gives social contributions; from the instant that businesses recognize the behavior of online purchasing, they can increase the involvement, contact, and usability that will be communally valuable in the day-to-day of the people and particularly in a disaster. This study also contributes to the theory of planned behavior to add the aspects of perceived risk, trust and product variety in the framework.

5.4 Limitations and Future Study Suggestions

There are some limitations of this study. First, the sample is collected only of Malaysian customers and, meanwhile this is a non-probabilistic sample, implication to the repose of the population is not conceivable. Thus, upcoming researches can be directed in the Malaysian and global perspective with the projected model, with a more illustrative sampling procedure, and a random collection of respondents. Secondly, the planned model does not deliberate all probable aspects influencing customers' online buying behavior. The collection of data happened at the start of winter and some months in the epidemic when there were more mobility constraints, impacting the choice to purchase online. Therefore, it is recommended to increase the theoretical model verified here, counting other aspects not measured in the current research or the practice of the existing model at diverse moments of the epidemic. It is also suggested to practice the model projected herein researches on online shopping in specific sections, such as food and apparel. Though, although it is known that the outcomes and suggestions of the

current study are inadequate and need carefulness in its extrapolation and simplification, it is obvious that these confines do not conciliate the investigates achieved and the contributions offered by the equal to academia, the market, and culture. Lastly, in this research only three online shopping variables were taken which explained only 40% of variance in buying behavior however there are some other variables that could contribute in buying behavior. So in future study, other variables included brand image, and perceived usefulness as suggested by Akter and Sultana (2020) can be included in model to give more robust findings.

5.5 Conclusion

During and after covid-19 the trend of online shopping has increased rapidly as consumers found it easy solution for safe buying. Online shopping saves vital time and for current individuals because they get so busy that they cannot or reluctant to spend much time on shopping (Sumi and Ahmed, 2021). Covid-19 positively impact on online shopping in Malaysia as people were in isolation and cannot go physically in stores for shopping. Thus, this pandemic has changed the buying behavior pattern of consumers. The current study was conducted on Malaysian people online buying behavior and the factors such as perceived risk, trust and product variety that impact on their online buying intention during covid-19 situation.

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APPROVAL PAGE

TITLE OF PROJECT PAPER: A STUDY ON FACTORS INFULENCE ON CUSTOMERS
BUYING BEHAVIOR TOWARDS ONLINE SHOPPING
DURING COVID-19 PANCEMIC IN MALAYSIA

NAME OF AUTHOR : RAHIYA BINTI KUNJI MOIDIN KUTTY

The undersigned certify that the above candidate has fulfilled the condition of the project paper prepared in partial fulfillment for the degree of Master of Business Administration.

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