

UNIVERSITI TEKNOLOGI MARA



**FACTORS INFLUENCING CONSUMER'S BEHAVIOUR
TOWARDS ONLINE SHOPPING IN MALAYSIA**

**NURUL HAZLIN BINTI ZULKIFLI
NURUL AMIRA BINTI ROHI'SHAM
SITI HAJAR BINTI MUHAMAD JOHAN**

**BACHELOR OF SCIENCE (HONS.) STATISTICS
FACULTY OF COMPUTER AND MATHEMATICAL SCIENCES**

FEBRUARY 2022

UNIVERSITI TEKNOLOGI MARA

**FACTORS INFLUENCING CONSUMER'S BEHAVIOUR
TOWARDS ONLINE SHOPPING IN MALAYSIA**

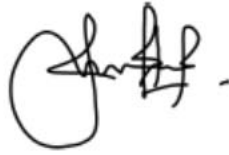
NURUL HAZLIN BINTI ZULKIFLI (2020995029)
NURUL AMIRA BINTI ROHI'SHAM (2020996921)
SITI HAJAR BINTI MUHAMAD JOHAN (2020963691)

Final Year Project Proposal Submitted in Partial Fulfillment of the
Requirements for the Degree of
BACHELOR OF SCIENCE (HONS.) STATISTICS

FACULTY OF COMPUTER AND MATHEMATICAL SCIENCES

FEBRUARY 2022

APPROVED BY:



MADAM NORNADIAH BINTI MOHD RAZALI
Supervisor
Faculty of Computer and Mathematical Sciences
Universiti Teknologi MARA Negeri Sembilan
Seremban Campus

ABSTRACT

This research looked at consumer's behaviour towards online shopping in Klang Valley. Two research questions were raised to guide this study on factors that influence consumer's behaviour towards online shopping and the difference in behaviour between students and workers in Klang Valley. The research used descriptive analysis, Mann-Whitney U test, and multiple linear regression as methods of analysis. The population in this research are all online shoppers in Klang Valley, with 335 online shoppers were chosen by convenience sampling as samples. The instrument for this research was a questionnaire distributed to the respondents using an online survey form. Based on the analysis, it was found that the consumer has a positive perception about the behaviour towards online shopping. Furthermore, there is no difference in behaviour towards online shopping between students and workers. In conclusion, all four factors considered in the study are significant in determining consumer's behaviour towards online shopping in Malaysia. Hence, consumers need to have a more profound knowledge of these issues even though this issue is quite common among Malaysian people. Nevertheless, the knowledge and awareness about the importance of online shopping should be highlighted so that the widespread fraud does not easily mislead people.

ACKNOWLEDGEMENT

IN THE NAME OF ALLAH, THE MOST GRACIOUS, THE MOST MERCIFUL

All praises with our deepest gratitude for Almighty Allah, whom, with His willing giving us the opportunity to complete this Final Year Project. First and foremost, we are grateful that we were able to finish our Final Year Project in the allocated time successfully. This project was prepared in partial fulfilment of the requirements for the Degree of Bachelor of Science (Hons.) Statistics, Faculty of Computer and Mathematical Sciences.

Despite our accomplishment in completing this project, there are certain individuals that assist us in completing it. We want to thank everyone who helped and encouraged us, especially our supervisor, Madam Nornadiah binti Mohd Razali, our lecturer STA650, Dr Nurul Nisa' binti Khairol Azmi and also our lecturer MSP660, Madam Zaitul Anna Melisa binti Md Yasin, who provided invaluable advice and helped us fix our project's flaws. We were able to get an excellent outcome in our Final Year Project as a result of them.

We would also like to express our appreciation to Universiti Teknologi MARA (UiTM) for providing us with the chance to perform this study about Factors Influencing Consumer's Behaviour Towards Online Shopping in Malaysia. Thank you also to the members of this group for their tireless efforts in completing this study. Not forget to mention the respondents that assisted us in providing honest responses to our questionnaire. Finally, we appreciate all of the help we have received from many peoples.

TABLE OF CONTENTS

ABSTRACT	i
ACKNOWLEDGEMENT	ii
TABLE OF CONTENTS	iv
LIST OF TABLES	v
LIST OF FIGURES	vi
Chapter 1 Introduction	1
1.1 Background of Study	1
1.2 Problem Statement	4
1.3 Research Objectives	5
1.4 Research Hypothesis	5
1.5 Significance of Study	5
1.6 Scope and Limitation	6
Chapter 2 Literature Review	7
2.1 Introduction	7
2.2 Convenience	8
2.3 Time Saving	9
2.4 Website Design/Features	11
2.5 Security	13
2.6 Conclusion	15
Chapter 3 Methodology	17
3.1 Introduction	17
3.2 Research Design	17
3.3 Theoretical Framework	17
3.4 Data Collection Method	18
3.5 Research Instrument	19
3.6 Population and Sample	20
3.7 Sampling Design	20
3.8 Methods of Analysis	21
3.8.1 Descriptive Analysis	22
3.8.2 Comparing The Means	22
3.8.3 Multiple Linear Regression	23
3.9 Pilot Study	27
3.10 Conclusion	28
Chapter 4 Results and Discussions	29

4.1	Introduction	29
4.2	Profile of The Respondents	29
4.3	Distribution of Respondents by Consumer's Behaviour and Mean Score of Consumer's Behaviour Towards Online Shopping	32
4.4	Comparing Behaviour Towards Online Shopping Between Working Status	36
4.4.1	Normality distribution requirements	36
4.5	Determining The Factors Influencing Consumer's Behaviour Towards On-line Shopping in Malaysia	37
4.5.1	Assumptions of Multiple Linear Regression	37
4.5.2	Model Evaluation	40
Chapter 5	Conclusion and Recommendation	43
5.1	Conclusion	43
5.2	Recommendation	44
	References	45
	APPENDIX A: GANTT CHART	49
	APPENDIX B: RESEARCH QUESTIONNAIRE	50
	APPENDIX C: ETHICS APPROVAL	59

LIST OF TABLES

3.1	Summary of Items in Questionnaire	20
3.2	Methods of Analysis	21
3.3	Statistical Tests used for Comparing Two Independent Means	22
3.4	Analysis of Variance Table (ANOVA)	26
3.5	Analysis of Variance Table (ANOVA)	28
4.1	Frequency Table of the Consumer's Behaviour	33
4.2	Mean Score of Consumer's Behaviour	35
4.3	Test of normality	36
4.4	Test of normality	36
4.5	p-value between Consumer's Behaviour and Convenience, Website Design/Features, Time Saving and Security	37
4.6	Multicollinearity Test	39
4.7	Durbin-Watson Statistic	40
4.8	Estimated Coefficients of Variables	40

LIST OF FIGURES

3.1	Theoretical Framework	18
4.1	Distribution of Respondents by Age Group	30
4.2	Distribution of Respondents by Gender	30
4.3	Distribution of Respondents by Marital Status	31
4.4	Distribution of Respondents by Students and Workers	32
4.5	Scatterplot of Consumer's Behaviour versus Convenience, Website Design/Features, Time Saving and Security	38
4.6	Normal P-P of Residuals	38
4.7	Scatterplot of Residual versus Predicted Value	39

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF STUDY

Advanced technology in this modern world shows that internet has a rapid growth as it is one of the most important things that is widely used by many people around the world since many things that people need to do is related to the internet. Nowadays, internet is massively being used for business as it can continuously be used for 24 hours a day. According to Koran, Faber, Aboujaoude, Large, and Serpe (2006), about 6 percent of females were addicted to shopping online, while about 5.5 percent of males were addicted to shopping online. Therefore, there is a lot of people taking the advantages of the internet to sell their products online since it will be easier for the consumers. Not just that, shopping online can save a lot of time and it is very convenience to choose a variety of products which cannot be found in physical store. Besides that, shopping online also can prevent the consumers from feeling lonely and be away from stress. It gives the consumer a short-term relaxation. As reported by Forrester Research, the amount of shopping online will expand to USD250 billion by the year 2014 in the United States and it will increase gradually about 8 percent to 10 percent annually. According to Eroglu (2014), a survey conducted in 11 countries such as Turkey, France and United Kingdom (UK) and the result of the survey stated that the consumers prefer to do online shopping. Along with it, the e-commerce activity in Malaysia also has gradually increased from 2010 to 2015. It is estimated that the e-commerce will increase two hundred and sixteen percent in 2010 to RM 5.76 billion in 2015 (Kiu & Lee, 2017).

According to Rashid, Yusof, Misiran, and Mahmuddin (2019), 15.3 million users of online shopping and 62 percent of smartphone users use their smartphones to shop online. The growth of the internet in the Malaysia is mainly because of the high speed internet that is provided in the country. Consequently, a few online shopping websites that are frequently used and widely known by consumers in Malaysia such as Lazada, Shopee, 11streets and many more have emerged. By the fact, in 2020, Lazada has made a 11.11 Super Show and surprisingly, the company stated that there were 240,000 users who watched the programme and more than 13,000 items were sold out in less than 2 hours. Along with it, Shopee has also managed to sell about 58,000 variety of products within a minute. Malaysian Communication and Multimedia Commission stated that, shopping online has already become a vital activity for the internet users. In addition, it also stated that 48.8 percent of the Malaysian, make the online shopping as the main activity in their free time (Chuah, Ng, & Khan, 2018). Moreover, online advertisement can attract more consumers to use the online shopping and it will increase the sales of the retailer's store.

From the current situation due to pandemic Covid-19, all people around the world need to stay at home including students and workers. The people need to follow the Standard Operating Procedure (SOP) that has been mentioned by the government. All the schools are temporary closed and most of the workplace too. Therefore, the students need to study online while the workers need to work at home to reduce the infection and spread of Covid-19. As a result, the number of consumers who use online shopping increases rapidly since people cannot go out if there are no important things that need to be done. According to Leo Chow, Chief Executive Officer (CEO) of Lazada, there was 12 times increase of sales during their recent Lazada 10.10 sale which was held last October 2020. According to Bhatti et al. (2020), the products that the consumer mostly buy during the pandemic are toilet paper, disposable gloves, air purifier, exercise equipment and puzzles. In almost one

and a half year of this pandemic, people tend to shop online since the consumers already are used to it as it is more convenience. Besides that, the consumers can easily compare the price of product between the websites of the store and choose the cheapest and the best quality of the product. According to Tuttle (2013), online shopping is one of the ways to release the stress of studying or working while not studying or working.

According to Omar (2000), it seems that there was a difficulty in understanding consumer's behaviour towards online shopping and with the growth of online consumers during the pandemic, a study on the behaviour of the consumers towards online shopping would be beneficial to the retailers to enable retailers to establish more successful and focused online shopping operations that are adapted to the needs and expectations of their new online shopping consumers (Harn, Khatibi, & Ismail, 2006). According to Delafrooz, Paim, Haron, Sidin, and Khatibi (2009), consumers' characteristics such as personality types, online shopping perks and consumers' perceptions were closely associated with the online shopping behaviour. The Theory of Reasoned Action (TRA) claims that a consumer's behaviour is determined by his or her desire to engage in certain behaviours. On the other hand, a consumer's purpose is governed by two factors: their attitude toward the behaviour and their subjective norm. Attitude is defined as "the degree to which a consumer has a favourable or unfavourable judgement or appraisal of the subject behaviour." Attitude is a person's belief about a behaviour and their perception of the outcome of that behaviour. For instance, if a consumer considers internet purchasing as a pleasurable experience, that consumer is more likely to engage in it (Wen, Satar, Ishak, & Ating, 2020). There are also a lot of other factors that influence the behaviour of the consumers towards online shopping such as convenience, time saving, website design/features and security. Therefore, this study was conducted to identify the factors influencing the consumer's behaviour towards online shopping in Malaysia. Along with

that, this study was also conducted to compare the behaviour towards online shopping between students and workers to determine whether there is difference in behaviour for these two towards online shopping.

1.2 PROBLEM STATEMENT

Currently, technology has changed the way of shopping among consumers. Moreover, with the current situation that plaguing the entire world with the Covid-19 pandemic, everyone is encouraged not to go out if there is no important things to do. Due to this situation, online shopping activity has been on the rise since it allows people to purchase things without going out from home. However, several issues have emerged with the rise of online shopping activity especially in terms of convenience, time saving, website design/features, security and others. Online shopping has also damaged the life style that redefined the shopping pattern of the consumers because people prefer online mode to purchase their goods. One of the challenging parts faced by online retailers are to understand consumer's behaviour in online shopping. In light of the growing importance of online retailing in the worldwide market, data on online consumer buying behaviour is desperately needed. Understanding the factors that influence consumer's behaviour to purchase online could help the online retailers to formulate their strategies to attract more consumers.

In addition, consumer's expectation of the convenience of online shopping is high. Therefore, online retailers must do the best to attract consumers by providing good services than outside stores. Sometimes certain items are difficult to find in the store, but online shopping makes it easier to find the items that the consumer wants and it is also more time saving. Even so, the consumers still feel insecure while purchasing items online because there is no guarantee of the product's quality. Therefore, this study was conducted to determine the factors that influence consumer's behaviour during online shopping. This study provides the overview to online retailers in Malaysia to promote

their goods and services in the light of consumers behaviour.

1.3 RESEARCH OBJECTIVES

1. To compare the behaviour towards online shopping between students and workers in Malaysia.
2. To identify the factors that influence consumer's behaviour towards online shopping in Malaysia.

1.4 RESEARCH HYPOTHESIS

H_1 : The behaviour towards online shopping differ by the working status.

H_2 : Convenience does influence the consumer's behaviour towards online shopping in Malaysia.

H_3 : Website design/features does influence the consumer's behaviour towards online shopping in Malaysia.

H_4 : Time saving does influence the consumer's behaviour towards online shopping in Malaysia.

H_5 : Security does influence the consumer's behaviour towards online shopping in Malaysia.

1.5 SIGNIFICANCE OF STUDY

These findings will be beneficial to the retailers to study consumer's behaviour of online shopping to meet the consumer's demand. This might be slightly different in demand among students and workers. By this study, the retailers can focus on fixing the shortcomings in terms of improving their websites, their services and the quality of products to meet consumer's demand.

Apart from that, this study highlights the factors that influence consumer's behaviour during shopping online especially among workers and students. To those researchers who do the similar research, this study can be used as a reference. Hence, the result of the study are expected to be beneficial to online retailers and future researchers.

1.6 SCOPE AND LIMITATION

The study was conducted for the purpose of determining the factors that can influence online consumer's behaviour in Malaysia. The data was collected through Microsoft Forms platform and only the students and the workers who have experience in online shopping in Malaysia were considered as the respondents in this study.

Due to Coronavirus Disease 2019 (Covid-19) issue, the researchers were unable to conduct a face-to-face survey since people were not allowed to organise gatherings and need to maintain social distancing for the time being. Consequently, the researchers have taken other alternative which was distributing the questionnaires through online platform.

This research only focus on four factors that influencing consumer's behaviour towards online shopping in Malaysia which are convenience, website design/features, time saving and security. Thus, the results are interpreted with concerned, especially in explaining the research findings that not including another factors that might be influence in consumer's behaviour towards online shopping in Malaysia. Other than that, considering the size of Malaysian population, the sample size included in the study was relatively small to accurately evaluate consumer's behaviour in Malaysia. However, a large target population requires more time to obtain the result. Therefore, the researchers were unable to administer to a very large sample due to time and financial constraints.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Nowadays, online shopping has become popular day by day. A large number of people buy almost everything for their needs on the internet. Isohella et al. (2017) stated that the exposure to the internet technology has favourably affected our daily routines and lives. Kim, Shin, and Lee (2009) said that the internet transformed how businesses operate globally. In the present state of the world due to the pandemic Covid-19, many people were affected and they were afraid to go out to buy things. They were more concerned about their health and take the opportunity to use technology to buy their needs and necessities.

It is easier to search and find for information about the products by using internet. Therefore it has become a primary reason for the consumers to use the internet to shop online. There are many ways for the consumers to do so. Not only buying the products, but also to compare product qualities, prices and delivery services. The Asia Pacific recorded massive growth with the majority are from China which the country made about 1 trillion in online sales constituting about 899 billion (Rahman, Islam, Esha, Sultana, & Chakravorty, 2018). In the Southeast Asia, Indonesia was ranked first in the growth of the digital economy, with e-commerce transactions reaching 21 billion or around Rp.294 trillion. The value was expected to multiply to 82 billion by 2025 (Chusminah, Sugiyah, Haryati, & Lestari, 2020). Online purchases in Malaysia in contrast has climbed thrice between 2010 and 2015, with total sales rising from RM1.82 billion to RM5.76 billion.

The advancement of technology around the world make it a common thing that people always use in their daily life. Due to the pandemic Covid-19, many people around the world were affected. Most working people have lost their job since they need to follow the Standard Operating Procedure (SOP) and need to keep distance between people. Not just that, students also were affected since schools and universities were closed and need to learn and attend the classes online. In addition to that, people who carry out business especially small business were also affected since they cannot open their shops or sectors. Therefore, they take the advantage of technology by selling their products online. This leads to rapid growth of demands for the product at the online shop since it is easier for people to buy things that they want. Previous studies shown that many researchers focused on testing the relationship between various factors and online shopping behaviour. This study also attempts to investigate the factors that influence consumer's behaviour towards online shopping in Malaysia which are convenience, time saving, website design/features and security. In addition to the previous studies, this study compares the behaviour towards online shopping between students and workers.

2.2 CONVENIENCE

One of the factors that influence consumer's behaviour towards online shopping is convenience. Gradually and surely online shopping is more convenience and become more popular because online shopping can benefit a higher level of satisfaction to the consumers in terms of quality and attractiveness of the delivery. People enjoy more shopping through online that is convenient for them. In Pakistan, Ahmed, Su, Rafique, Khan, and Jamil (2017) revealed that shopping online was in demand compared to traditional shopping because it easy to use and convenience, therefore gaining more recognition. Also, consumers were no longer limited to the products offered by local stores because majority of online retailers offer shipping delivery to a variety of areas and it is easier for consumers to find hard-to-hard items or items that are the speciality to a

certain region. According to Usman and Kumar (2020), consumers feel free to use online shopping since it allows them to have 24 hours business deals without having physical interaction. Online shopping helps consumers and the retailers to establish relationship, as well as improve consumer's loyalty and retention. In online environment, according to Usman and Kumar (2020), consumers who chose to shop online were more convenient, less experience oriented and spend less money. Many researches talk about this factor of convenience, and this is why people prefer online shopping more than going outside to buy things. Online shopping saves their time and effort, it is really quick, easy, close by and allows consumers to get what they need and when they need it.

If there is a lot of procedures to buy the products from the online shop, it will make the consumer lose their patience and tend not to proceed from buying the products and they will buy the product from another shops. According to Jarvenpaa, Tractinsky, and Vitale (2000), the retailers need to focus on the convenience of their online shop to fulfill the demand of the consumers. The retailers need to ensure that their online shop is more customer-focused such as the fastest delivery after purchasing the products, easiest transaction checkout so that the consumers can purchase the products smoothly. Other than that, it should be convenience for the consumer to search for the information and review about the product that they want. This will help the consumers to choose the best products. Therefore, the retailers need to make it convenience for the consumers while surfing the online shop to attract more people to come and buy the products from their online shop.

2.3 TIME SAVING

The reason online shopping is gradually becoming popular because of time saving and the varieties of products available (Rahman et al., 2018). Javadi, Dolatabadi, Nourbakhsh, Poursaeedi, and Asadollahi (2012) reported that online stores had many advantages

compared to physical stores such as time saving and no waiting in lines is needed since it is open in all time, accessible anytime and anywhere. Herceg (2020) found that 60 percent of respondents selected online shopping because of the restriction of movement without permission while 50.7 percent respondents prefer it because of time saving during Covid-19 pandemic. Some websites offered some promotions to their consumers, so the retailers can provide a good deal for their products. By doing that, the websites became reliable and provide many choices and variety of products with lower prices. Since online shopping can be anywhere and anytime, it makes consumer's life easier because they do not have to spend more time just to make a simple transaction (Katawetawaraks & Wang, 2011).

Due to the pandemic Covid-19, all people who are working and studying need to adapt and adopt with the new lifestyle. They need to work and study from home so it will need a lot of time to manage their daily life. Therefore, the retailers need to make sure that their online shop is easier for the consumer to surf the shop because they need to save their time to buy products. According to Rudansky-Kloppers (2014), it will provide better and higher chances of the consumers to buy the products if it required a lesser time. Other than that, the retailers need to make sure that their delivery is on-time, so they can gain trust from the consumers to buy from their online shop again. According to Rohm and Swaminathan (2004), while purchasing the products, online shopping can save a lot of time compared to purchasing the products at the store. This is because the consumers only have to go through the internet and choose products that they want compared to going outdoor and queue up to purchase the products.

Through online shopping, less time is spent in resolving invoices, orders and purchasing of different products. According to Usman and Kumar (2020), consumers had the opportunity of purchasing any products at any time without physically visiting the outlets

and can minimize the transaction costs. Consumers also can purchase from any parts of the world. Furthermore, online shopping does not only save time but also money and give the opportunity to relax on our free day. Detailed information is available while shopping online and consumers can buy the product anytime in 24 hours a day. According to Chen et al. (2010), by purchasing products through online platform, it may reduce the efforts and time in the process of purchasing. Therefore, time saving is a supporting factor that influences online shopping.

2.4 WEBSITE DESIGN/FEATURES

Chusminah et al. (2020) found that the website must be reliable since the product cannot be touched while shopping and the consumers often evaluate a product based on the information given. The potential consumers then choose the best one that fits their criteria (Javadi et al., 2012). Rahman et al. (2018) observed that four dominant factors which influence consumer's perceptions of online purchasing are website design, website fulfillment, website customer service and website privacy. A high-quality system such as having desired speed, user-friendly websites, ease of access and using websites may reduce consumer's searching cost and time. The provided information in website store also has a significant impact on consumer's decision. To avoid drag any process and product searching, the website should not have a high resolution and dense graphics. (Bastam, Lotfabadi, Kouchakzadeh, & Faraji, 2017).

Internet eases many people and also provides consumers more information and choices to compare products and prices. The online company must have a strategy to attract consumer's attention by providing a well-organized website structure, attractive design, online promotion and provide an additional information to help consumers. Product assortment, sale services and information quality are the most important things to be placed to help and attract potential consumers to decide the product they would purchase.

These methods can stimulate their interests on particular products. It is reported that there is negative impact when website is too slow, the consumers are not willing to buy products from the website. The consumers knowledge about the product also influences online shopping behaviours (Katawetawaraks & Wang, 2011). Website safe and assuring consumers for the delivery of their products has positive effect behaviour towards online shopping. A researcher has revealed that channel knowledge and shopping orientations also can affect online buying behaviour (Herceg, 2020). Nguyen, Nguyen, and Tan (2021) stated that higher level of satisfaction was associated with information quality are provided in the websites.

Easy to use, easy to find the products, attractive and the website is easy to understand are the elements that the consumers will search for while going through the online shop (Barnes & Vidgen, 2002). Strengthen the statement, the factor for website features has also been proven to be significant (Shah, Peikari, & Yasin, 2014). It is the main important consideration to attract the consumers to surf their online shop. The more unique and easier to use online shop and higher quality of the website design/features, the more consumers will be attracted to purchase the products from the online shop. In addition, it will also increase the sales of the online shop and the consumer's satisfaction (Vazifehdust & Eskandarnia, 2012). Other than that, it will attract more consumers if the website design is user-friendly and gives a significant impact. According to Vazifehdust and Eskandarnia (2012), consumer satisfaction has a positive influence towards the website design.

People are more concerned about the website design before purchasing their products using online websites such as Lazada, Shopee, Zalora and others. According to Ahmed et al. (2017), the way to help consumers while shopping online depend on the website design and website layout. This is important to help consumer in searching and selecting the right product. Each website that was able to generate income (or its intention to generate

income) can be included in this category (Bucko, Kakalejčík, & Ferencová, 2018). Website design/features is one of the factors that can attract consumer to go to their shops and they prefer to buy from website that provides a quality of information. The retailers should make sure their store provides safety and ease of navigation to place orders. Furthermore, internet has become a basis of services and information. A well-structured e-commerce website is necessary for users to gain information and enhance their participation. Online retail websites can serve as a means of communication and interaction for both consumers and general public as well (Usman & Kumar, 2020). This is how the consumers measure their trustworthiness to the service quality to ensure the consumer belief in the website.

2.5 SECURITY

Rahman et al. (2018) reported, consumers' top concerns when shopping online were privacy of personal information and security of financial transactions. Most of online retailers provide a money-back guarantee policy including shipping expenses refund since digital payment is the nature of online purchasing. There are some retailers who are working together with other companies to avoid shipping delay and product lost. Katawetawaraks and Wang (2011) stated that the amount of online consumers kept on growing during Covid-19 pandemic. 60.7 percent of respondents mostly buy online since many consumers spent more time at home and contactless payment was recommended in order to avoid possible infection. Security perception is also one of the most important factors in influencing consumer's behaviour right after consumer's attitude. To gain the consumers' trust, the retailers should provide a warranty or returned policy when doing a transaction or purchasing process and the Internet Payment Gateways must be maximally secured in order to avoid any money be hacked or stolen. Information quality and security perceptions affect information satisfaction and actual purchase behaviour. Most of the consumers have a complete trust of digital payments especially during Covid-19 pandemic. The majority of respondents prefer credit cards 62.1 percent, 6.5 percent prefer

internet banking and 5 percent of respondents prefer PayPal (Herceg, 2020).

In the wake of the Covid-19 pandemic, hundred thousand of consumers have switched to shopping for items online that they used to get at their neighbourhood stores. According to Dani (2017), consumers and online shoppers were concerned about security issues, quality and reliability of information. One respondent claims “The biggest problem I have with online shopping is to trust the product quality and delivery, especially since I rely totally on second hand information that someone gives me about the product rather than I see it for myself”. This is how the retailers should give the right information on their website so that consumers feel safe and secure while shopping online. Today, scammers are everywhere and people are afraid to purchase indiscriminately. Despite the fact that online shopping has indisputable benefits, it continues to generate unfavourable headlines. Thus, consumers’ willingness to shop online because of security, that a major predictor to shop online. According to Wai, Dastane, Johari, and Ismail (2019), there are still many consumers who do not shop online because they are too concern about the security. There are also online shoppers who prefer other payment methods to avoid using credit cards such as cash on delivery (COD) and online/offline banking transfer. The major reason why consumers keep away from online shopping is because of security problem, they are concern about transaction security and data personal.

According to Sorbel (2003), hackers will use the personal data information of the consumers for their own bad intention. Therefore, the retailers need to tighten their security controls to avoid hackers easily hacking their website. When the consumers are surfing the online shop, personal data information about themselves are the most important things to make sure that the data is save from strangers that will use it for other purposes. According to Pinto, Santos, and Marques (2009), the consumer’s personal information security and protection need to be emphasize by the sellers. Lack of security

for personal data information can prevent the consumers from buying the products from online shop because they are anxious and worry about their credit card or debit card being misuse by other people. Therefore, they need to gain trust from the consumers by tighten their security of their online shop. According to Shah et al. (2014), the consumers' satisfaction for security towards online shopping rely on their expectation in specific related factors such as third party seals.

2.6 CONCLUSION

In summary from the previous studies, it can be concluded that there are several factors that influence the behaviour of consumers towards online shopping. According to Dani (2017), improving the factors that impact consumer's decision to shop online and focusing on the factors that influence consumer's decision to buy online will help marketers achieve a competitive advantage over their competitors. By doing some researches about consumer's behaviour towards online shopping, it would benefit the online retailers to fix their problem to fulfil consumer's satisfaction in the aspect of security, quality of products and in website features while to policymakers, they can craft their strategies properly for the market (Rahman et al., 2018). It needs a lot of efforts for the retailers to gain the trust and satisfaction through different aspects from the consumers. From the literature review, there are four main factors that influence online shopping which are convenience, time saving, website design or features and security. In this modern world, convenience is one of the elements that consumers are looking for. They want it to be easier for them to go through their daily life. Besides convenience, time saving also is one of the important things since consumers might be busy with studying or working. Therefore, consumers do not have enough time to go to the store to purchase the products. As a result, shopping online is the way that can save enough time by purchasing via their smartphones or laptops. In the meantime, consumers also can have a leisure time for themselves. Consumers tend to be more attracted to the design of the online shop because it is easier

for them to look for the products that they want. If the design of the website is messy and hard to find the products, the consumers will tend to search it from another online shops. Personal data information is extremely confidential for consumers since the data might be misused by hackers for their own purposes. Therefore, the consumers will purchase the product from the online shop that they trust with a high and reliable security to protect their personal data information. From the previous studies, only a few analysis focus on demographic profile of the online shopper. Hence, this research attempts to determine the factors that influence consumer's behaviour towards online shopping.

CHAPTER 3

METHODOLOGY

3.1 INTRODUCTION

This chapter describes the research methodologies and statistical methods applied in the study. The explanation starts with the research design, followed by the theoretical framework, sampling method, data collection method, research instrument and methods of data analysis. Prior to that, the suitable sampling technique is also explained. The last section discusses three different methods of analysis employed in the study to fulfill the research objectives of this research paper.

3.2 RESEARCH DESIGN

The proposed research design is a cross-sectional design. Cross-sectional study focuses on a type of research method that involves observing the entire population, or a representative subset of it, at a specific time. In this type of study, respondents are chosen based on certain criteria of interest. This research has conducted a cross sectional study design because this study seeks to relate thought, also this study used a self-administered questionnaire. This type of research can be used to identify community features, but it cannot be utilised to determine cause and effect between variables. So, in this research, this study use cross-sectional research design to achieve the objectives of research.

3.3 THEORETICAL FRAMEWORK

This research employs a theoretical framework derived from two previous research, where to determine dependent variables taken from Wai et al. (2019) while for independent variable were from Kasuma, Kanyan, Khairol, Sa'ait, and Panit (2020). In this theoretical

framework, the main interest is to determine the factors that influence consumer's behaviour towards online shopping in Malaysia. The dependent variable is the behaviour towards online shopping and the independent variables are convenience, website design/features, time saving and security. So, in this research, to examine the objectives, cross-sectional research design would be the best method to make inferences about possible relationship.

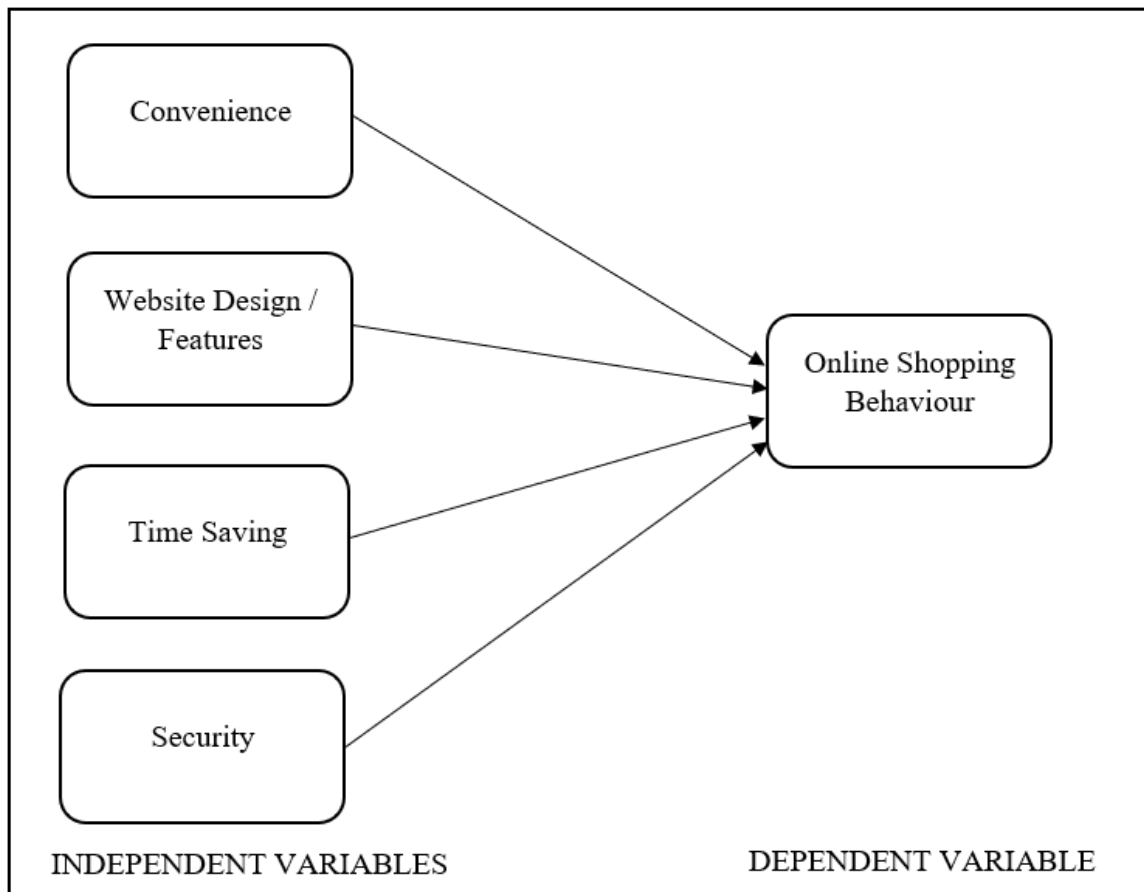


Figure 3.1: Theoretical Framework

3.4 DATA COLLECTION METHOD

The data relevant to the factors influencing consumer's behaviour towards online shopping in Malaysia was collected by using an online questionnaire which was created using Microsoft Forms. The advantage that the researchers obtained for using online

questionnaire is it was inexpensive since it was a cost-efficient way to collect findings from a massive number of respondents. Therefore, it increases the response rate of the questionnaire since it was very convenience to everyone. Other than that, the researchers can get the results immediately without consuming too much time. However, there were also disadvantages for online questionnaires such as the results that might be not accurate since the chances for the respondents to just click a random button of the answers of the questions easily. Additionally, the absence of an interviewer complicates matters for respondents, as respondents are unable to ask questions they do not understand. For this research, the time frame for the researchers to collect the responses from the respondents was two months since the sample size of this research was quite large, which was 335 respondents. The questionnaires were distributed to respondents via Whatsapp, Telegram, Facebook and Email.

3.5 RESEARCH INSTRUMENT

This research adapted a questionnaire from Dani (2017) and Rashid et al. (2019). The questionnaire consists 35 questions that were categorized into three parts. The questions consists of open-ended and close-ended questions where there are choices of answer and blank spaces be completed by the respondents. Part A consists of demographic information such as age, gender, occupation, race, education level, marital status and monthly income. For Part B, there are 13 questions that are related to online behaviour and lastly for Part C, there are 15 questions of 4 factors influencing consumer's behaviour towards online shopping in Malaysia. For Part B and Part C, Likert scale was used to measure the consumer's behaviour since the scale of measurement is interval. The respondents need to indicate their level of agreement which are strongly disagree, disagree, neutral, agree and strongly agree with a value of 1,2,3,4 and 5 respectively.

Table 3.1: Summary of Items in Questionnaire

Item	Part	Number of Questions	Question Number
Demographic	A	7	1 – 7
Online Behaviour	B	13	1 – 13
Factors Influencing Consumer's Behaviour Towards Online Shopping in Malaysia :		15	1 – 15
1) Convenience		4	1 – 4
2) Website Design/Features	C	5	5 – 9
3) Time Saving		3	10 – 12
4) Security		3	13 – 15

3.6 POPULATION AND SAMPLE

This study was conducted among workers and students who have experiences in online shopping in Malaysia. In consideration of the large population of online shoppers in Malaysia which requires a lot of time and cost, the researchers have decided to consider only the area with the highest percentage of internet users. This decision was parallel to Chuah et al. (2018) who chose online shoppers in Klang Valley as respondents since it has the highest percentage of internet users in Malaysia. Therefore, the population in this study was all online shoppers in Klang Valley. The total population was unknown. Therefore, the sample size was determined from the previous studies. The sample size was determined based on Omar (2000) and Chuah et al. (2018) who used sample size of 450 and 221, respectively which were obtained by convenience sampling as well. Therefore, from these two previous studies, the researchers concluded that the average sample size used in this research was 335 respondents.

3.7 SAMPLING DESIGN

A sampling design is a framework that serves as the basic for the selection of a survey sample and affects many other important aspects of a survey as well. Sampling techniques can be classified as random sampling (probability sampling) and non-random sampling

(non-probability sampling) methods. In this research, the researchers focused on non-random sampling, where it can be divided into four different samplings which are convenience sampling, judgement sampling, quota sampling and snowball sampling. Some of the advantages on using non-random sampling are it is less expensive and is convenient in terms of efforts, cost and time.

In this research, since the population of this study was all online shopping in Klang Valley, it is difficult to obtain the sampling frame. Hence, since there was a lack of information about the respondents and it is impossible to gain the sampling frame, the researchers have decided to use a convenience sampling technique. In other words, the respondents were selected at the researcher's convenient. Questionnaires were distributed to any people within Klang Valley who have experiences in online shopping.

3.8 METHODS OF ANALYSIS

To achieve the objectives for this research, a few methods of analysis have been employed. The methods of analysis used were descriptive analysis, non-parametric test for comparing means of two populations and multiple linear regression (MLR) to identify the significant factors.

Table 3.2: Methods of Analysis

Research Objectives	Methodology
To compare the behaviour towards online shopping between students and workers in Malaysia	Two independent means test Non-parametric test: Mann-Whitney U test
To identify the factors that influence consumer's behaviour towards online shopping in Malaysia	Multiple Linear Regression

3.8.1 Descriptive Analysis

Descriptive analysis was used to analyse the demographic information of the respondents. The data were summarized and presented using descriptive statistics. To get the results from this method of analysis, simple calculation such as mean, standard deviation, frequency table, and appropriate graphs which were bar chart and pie chart will be produced. From the results, the distribution of respondents based on age, gender, marital status and also frequency table and mean score of consumer's behaviour were described.

3.8.2 Comparing The Means

A hypothesis testing for two independent population means was used to achieve the first objective which was to compare the online shopping behaviour between students and workers. There are several statistical tests that can be used to assess whether data are likely from a normal distribution such as Kolmogorov-Smirnov test, the Anderson-Darling test, and the Shapiro-Wilk test. In this study, the data can be determined whether it is normally distributed or non-normally distributed by conducting normality test. Non-parametric method is cases in which the probability distribution cannot be defined. Table 3.3 summarizes the non-parametric statistical tests used for comparing two independent means:

Table 3.3: Statistical Tests used for Comparing Two Independent Means

Non-parametric test
Mann-Whitney U Test: $u_i = n_i n_j + \frac{n_i(n_i-1)}{2} - \sum ri$ Where n is the number of samples, and $\sum ri$ is the sum of ranks.

The dependent variable in this case the behaviour towards online shopping was tested for the normality using Shapiro-Wilks or a graphical method such as a Q-Q Plot. Since the

group's data was not normally distributed and groups size differ, also the variances are unequal, the Mann-Whitney U test will be performed. Mann-Whitney U test used indicates that to compare whether the dependent variable differs between two independent groups where in this study were students and workers. Mann-Whitney U test is one of the statistical analysis when the data does not meet the requirement which is the data is not normally distributed. A significance threshold of 0.05 also known as alpha is usually sufficient. A significance level of 0.05 means there was a 5 percent chance of assuming there was a difference when there was not. The null hypothesis should be rejected if the p-value is less than or equal to the significance level. So, in this research Mann-Whitney U test was used to compare differences between two independent groups when the dependent variable is either ordinal or continuous.

3.8.3 Multiple Linear Regression

A multiple linear regression analysis has been performed to answer the second objective which is to identify the factors that influence consumer's behaviour towards online shopping in Malaysia. Multiple linear regression is a statistical technique that uses a dependent variable and two or more independent variables. It can be used to observe the data by fitting a linear equation and discover the strength of the effects after the independent variables be applied on a dependent variable to predict trends and future values. Before performing the multiple linear regression analysis, there are five assumptions to be considered:

1. Linearity

The relationship between dependent variable and independent variables assumed to be linear when there is no curve and has a straight line through the data points.

2. Normality of Residuals

Regression residuals by using normal p-p plot must be normally distributed where almost all the points lies on the straight line, no departures from the diagonal line.

3. Homogeneity of variance of the Residuals

The residuals are approximately rectangular-shaped where there is no relationship between fitted value and residual. This can be shown if it does not have pattern, and considered it is a constant variance.

4. No multicollinearity

It is no multicollinearity when the Tolerance Values are greater than 0.10 and Variance Inflation Factor (VIF) value are less than 10.

5. Independence of Residuals

This is basically needing the observations to be independent or uncorrelated from one another. This assumption can be tested by using Durbin-Watson statistic, when the it is expected to be close to 2.

Value of the dependent variable y is being distributed by every value from independent variable x . The regression line for p independent variables $x_1, x_2, \dots, x_p$ is defined to be $\mu_y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_p X_p$. The general regression model is shown below:

$$y = \beta_0 + \beta_i X_i + \varepsilon \quad (3.1)$$

where

y = dependent variable

β_0 = intercept

β_i = regression coefficient

X_i = independent variable

ε = error term

In this research, four independent variables are taken into account in the method, which are convenience, website design/features, time saving and security. Meanwhile, consumer's

behaviour towards online shopping serves as a dependent variable. The specific regression model is shown below:

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \quad (3.2)$$

where

y = Consumer's Behaviour towards Online Shopping

β_0 = y-intercept

β_1 = regression coefficient that measures a unit change in the Consumer's Behaviour towards Online Shopping when Convenience X_1 changes

β_2 = regression coefficient that measures a unit change in the Consumer's Behaviour towards Online Shopping when Website Design/Features X_2 changes

β_3 = regression coefficient that measures a unit change in the Consumer's Behaviour towards Online Shopping when Time Saving X_3 changes

β_4 = regression coefficient that measures a unit change in the Consumer's Behaviour towards Online Shopping when Security X_4 changes

X_1 = Convenience

X_2 = Website Design/Features

X_3 = Time Saving

X_4 = Security

ε = Error term

Model Evaluation

1. Coefficient of Determination

R^2 represents the fraction of variability in the dependent y that can be explained by the variability in the independent variable x , where $R^2 = \frac{SSR}{SSTO} = 1 - \frac{SSE}{SSTO}$. Adjusted

R^2 , computed to reflect the number of explanatory variables in the model. It is useful when to compare a few models that predict the same dependent variable but have different number of independent variable. Adjusted $R^2 = 1 - \frac{n-1}{n-(k+1)}(1 - R^2)$.

2. Fitness of Model

The test for significance of regression in the case of multiple linear regression analysis is carried out using the analysis of variance. F-test is used to check if a linear statistical relationship exists between at least one of the independent variables and the dependent variable.

Hypothesis statement:

$$H_0 : \beta_1 = \beta_2 = \dots = \beta_k = 0$$

$$H_1 : \beta_i \neq 0 \text{ for at least one } j$$

Table 3.4: Analysis of Variance Table (ANOVA)

Source	Sum of Squares	Degree of Freedom	Mean Squares	F
Regression	SSR	k	$MSR = \frac{SSR}{k}$	$\frac{MSR}{MSE}$
Error	SSE	$n - (k + 1)$	$MSE = \frac{SSE}{n - (k + 1)}$	
Total	SSTO	n-1		

where

$$SST = S_{yy}$$

$$SSR = \beta_1 S_{xy}$$

$$SSE = SST - SSR$$

$$S_{yy} = \sum Y^2 - \frac{(\sum X)(\sum Y)}{n}$$

3. Regression of Coefficient

The model is said to be useful if the p-value for the ANOVA F-test is less than α

(5%). In multiple regression model, one of the main purposes is to determine whether the independent variable is useful to be contributed to the model. To know whether independent variable is a useful predictor variable in this model, a test on the regression coefficient can be performed as follows:

Hypothesis statement:

$$H_0 : \beta_i = 0$$

$$H_1 : \beta_i \neq 0$$

y and x_i are not linearly related when the null hypothesis above were the case. When the null hypothesis above is not rejected, it can be concluded that the variable x_i is not significant and should not remain in the model The t-statistic is:

$$t = \frac{b_1 - 0}{se(b_1)} = \frac{b_1}{se(b_1)} \quad (3.3)$$

3.9 PILOT STUDY

The reliability test is conducted to measure the degree of accuracy of the questions that used in the research. By that, the questionnaire was distributed to a small number of respondents, to determine whether the respondents understood the wording of question and evaluate how the respondents answered each of question given. For this research, the reliability test involved 50 respondents (Valim, Marziale, Hayashida, Rocha, & Santos, 2015) from the all respondents in Klang Valley.

Table 3.5: Analysis of Variance Table (ANOVA)

Variables	Item	Cronbach's Alpha value
Consumer's Behaviour	n = 13	0.935
Convenience	nx1 = 4	0.738
Website Design/Features	nx2 = 5	0.899
Time Saving	nx3 = 3	0.707
Security	nx4 = 3	0.755
All items	n = 35	0.934

Based on table 3.5, consumer's behaviour has an excellent internal accuracy with Cronbach's Alpha value greater than 0.90. Meanwhile, all independent variables have a high internal accuracy since Cronbach's Alpha value is greater than 0.70. The Cronbach's Alpha value for convenience is 0.737, Cronbach's Alpha value for website design/features is 0.899, Cronbach's Alpha value for time saving is 0.707 and Cronbach's Alpha value for security is 0.755 (Taherdoost, 2016). In overall, the questions in each variable are considered as reliable and consistent for the research.

3.10 CONCLUSION

This research employed cross-sectional design where the respondents were students and workers in Malaysia who were selected at convenient by using convenience sampling method. The data were collected via online survey using Microsoft Forms. To achieve the objectives of this research, the researchers employed two statistical analysis which were Mann-Whitney U test to compare the behaviour towards online shopping between students and workers in Malaysia and Multiple Linear Regression to identify the factors that influence consumer's behaviour towards online shopping in Malaysia.

CHAPTER 4

RESULTS AND DISCUSSIONS

4.1 INTRODUCTION

The findings of the two objectives are shown in this chapter. The first section presents the demographic profile of the respondents, while the subsequent sections present the findings of the two objectives of the study. For the first objective, Mann-Whitney U Test was used to achieve the first objective, which was to compare the online shopping behaviour between students and workers, while for the second objective, Multiple Linear Regression was used to achieve the second objective, which was to identify the factors that influence consumer's behaviour towards online shopping.

4.2 PROFILE OF THE RESPONDENTS

Figure 4.1 shows that the highest number of respondents is between 18-30 years old, which are 166 respondents. Followed by 106 respondents from 31-50 years old, and the least number of respondents is 51 years old and above, which is only 63 respondents.

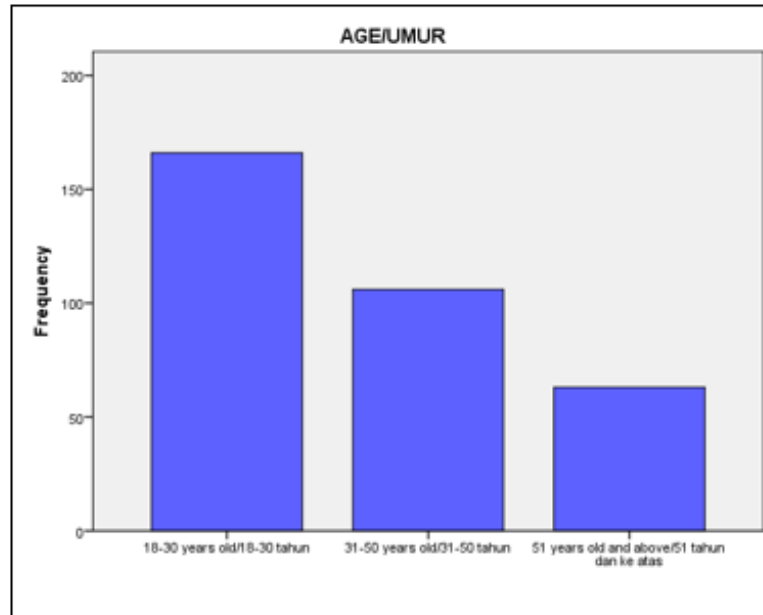


Figure 4.1: Distribution of Respondents by Age Group

Figure 4.2 shows that majority of respondents that answered the questionnaire are female, which is 57.61%, while male respondents that answered the questionnaire is 42.39%.

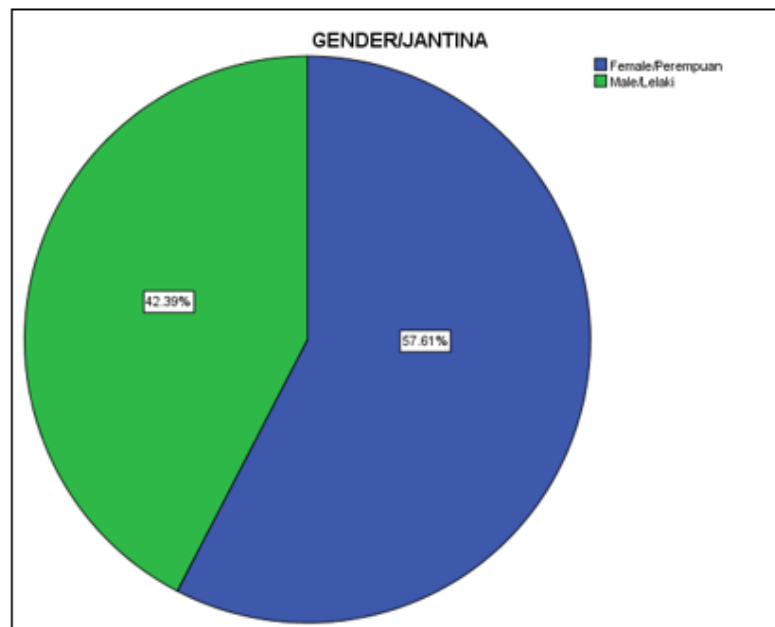


Figure 4.2: Distribution of Respondents by Gender

Figure 4.3 shows that most of the respondents are single, 54.03% and followed by married people, 38.21%. Divorced respondents are the least, which is only 7.76%.

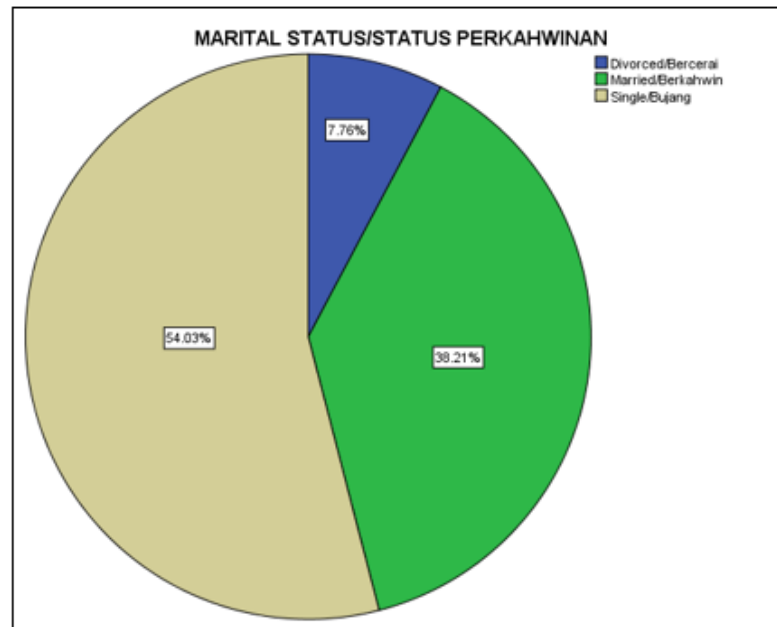


Figure 4.3: Distribution of Respondents by Marital Status

Figure 4.4 shows that workers is the highest number of respondents with 207 respondents compared to students with only 128 respondents.

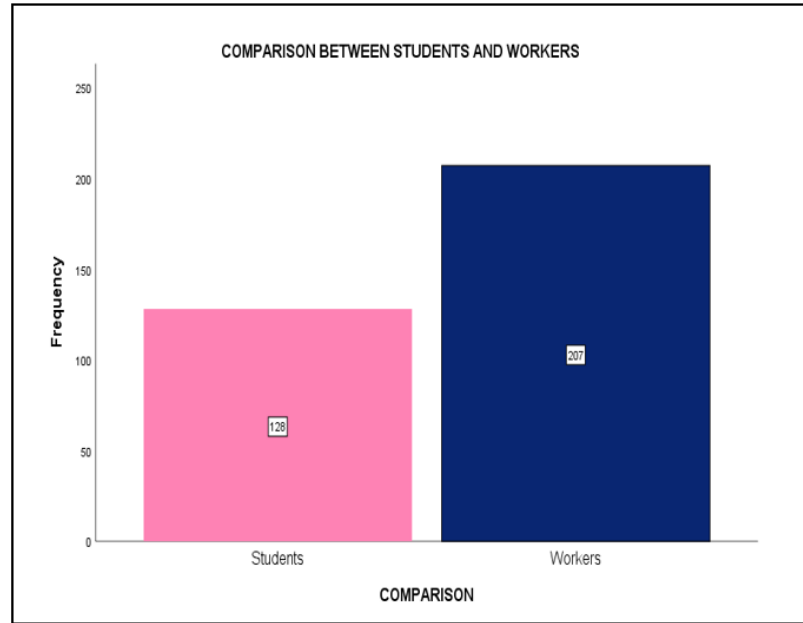


Figure 4.4: Distribution of Respondents by Students and Workers

4.3 DISTRIBUTION OF RESPONDENTS BY CONSUMER'S BEHAVIOUR AND MEAN SCORE OF CONSUMER'S BEHAVIOUR TOWARDS ONLINE SHOPPING

Table 4.1 shows a table about the consumer's behaviour towards online shopping obtained using a Likert scale.

Table 4.1: Frequency Table of the Consumer's Behaviour

Statement	Values				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
You are overall satisfied with your experience of shopping online	2 (0.60%)	4 (1.19%)	58 (17.31%)	198 (59.10%)	73 (21.79%)
Shopping through the internet makes information available at any time of the day	2 (0.60%)	2 (0.60%)	52 (15.52%)	151 (45.07%)	128 (38.21%)
I recommend good online shopping to my family and my friends	1 (0.30%)	9 (2.69%)	38 (11.34%)	158 (47.16%)	129 (38.51%)
There are more choices offered through online shopping than conventional shopping	2 (0.60%)	5 (1.49%)	37 (11.04%)	168 (50.15%)	123 (36.72%)
Based on my experience with online shopping in the past, I know it provides good service	4 (1.19%)	5 (1.49%)	64 (19.10%)	166 (49.55%)	96 (28.66%)
I will continue to be loyal to the online stores that I am satisfied with	3 (0.90%)	4 (1.19%)	40 (11.94%)	158 (47.16%)	130 (38.81%)
I shop online because the homepage of the online store is personalised or customised to my needs	2 (0.60%)	2 (0.60%)	53 (15.82%)	174 (51.94%)	104 (31.04%)
I will continue to shop online for a long terms	3 (0.90%)	6 (1.79%)	55 (16.42%)	150 (44.78%)	121 (36.12%)

I prefer to buy lower cost products online to reduce risk	1 (0.30%)	6 (1.79%)	49 (14.63%)	158 (47.16%)	121 (36.12%)
I have sufficient information and experience of the product to enable me to purchase it with confidence without physical inspection	4 (1.19%)	8 (2.39%)	56 (16.72%)	162 (48.36%)	105 (31.34%)
I find online shopping convenient	3 (0.90%)	0 (0%)	40 (11.94%)	164 (48.96%)	128 (38.21%)
I have a stronger willingness to buy online when I am having enjoyable online shopping experiences	2 (0.60%)	4 (1.19%)	56 (16.72%)	160 (47.76%)	113 (33.72%)
I often consider shopping online	5 (1.49%)	7 (2.09%)	53 (15.82%)	156 (46.57%)	114 (34.03%)

Table 4.1 shows that from 335 respondents, mostly has a positive perception about the consumer's behaviour towards online shopping. The highest percentage of every statements of the consumer's behaviour, "you are overall satisfied with your experience of shopping online" (59.10% respondents agree), "shopping through the internet makes information available at any time of the day" (45.07% respondents agree), "I recommend good online shopping to my family and my friends" (47.16 respondents agree), "there are more choices offered through online shopping than conventional shopping" (50.15% respondents agree), "based on my experience with online shopping in the past, I know it provides good service" (49.55% respondents agree), "I will continue to be loyal to the online stores that I am satisfied with" (47.16% respondents agree), "I shop online because the homepage of the online store is personalised or customised to my needs" (51.94% respondents agree), "I will continue to shop online for a long terms" (44.78% respondents agree), "I prefer to buy lower cost products online to reduce risk" (47.16% respondents agree), "I have sufficient information and experience of the product to enable me to purchase it with confidence without physical inspection" (48.36% respondents agree), "I find online shopping convenient" (48.96% respondents agree), "I have a stronger willingness to buy online when I am having enjoyable online shopping experiences" (47.76% respondents agree) and "I often consider shopping online" (46.57% respondents agree). Therefore can conclude that mostly all of the respondents agree about the consumer's behaviour towards online shopping.

Table 4.2: Mean Score of Consumer's Behaviour

Variables	Number of Samples	Mean	Standard Deviation
Consumer's Behaviour	335	4.1396	0.48058

Table 4.2 shows the mean score of consumer's behaviour. The results of mean show that the respondents have a high possibility to agree on the consumer's behaviour towards online shopping since the mean score of the consumer's behaviour is 4.1396.

4.4 COMPARING BEHAVIOUR TOWARDS ONLINE SHOPPING BETWEEN WORKING STATUS

4.4.1 Normality distribution requirements

The behaviour scores for each working status were tested for normality before comparing them. The Shapiro-Wilk test is a more appropriate normality test for small sample sizes less than 50 samples but can also handle sample sizes as large as 2000. The Shapiro-Wilk test was applied in this study to assess the normality of the behaviour scores. When the significance value of the Shapiro-Wilk Test is greater than 0.05, the data is normal. If it is below 0.05, the data significantly deviate from a normal distribution. The table below summarizes the Shapiro-Wilk Test for the data:

Table 4.3: Test of normality

Variables	Shapiro-Wilk		
	Statistic	df	p-value
Students	0.900	128	0.000
Workers	0.854	207	0.000

Table 4.3 shows the value of the Shapiro-Wilk test for students and workers, the p-value = 0.000, where the null hypothesis is rejected. Therefore, it can be concluded that the behaviour scores for both students and workers are not normally distributed since the p-value < 0.05 . Since the data does not meet normality requirements, a non-parametric test of Mann-Whitney U test was employed to compare the mean behaviour scores between students and workers. The result of Mann Whitney U Test is as follows:

Table 4.4: Test of normality

Test Statistics	p-value
Mann-Whitney U Test	0.252

The result found that the p-value is 0.252, more than 0.05. Since the p-value is more than

the significance level, the null hypothesis should not be rejected. Thus, there is no significant difference in the behaviour towards online shopping between students and workers. This indicates that the working status is not an important factor determining the behaviour towards online shopping.

4.5 DETERMINING THE FACTORS INFLUENCING CONSUMER'S BEHAVIOUR TOWARDS ONLINE SHOPPING IN MALAYSIA

4.5.1 Assumptions of Multiple Linear Regression

1. Linearity

The relationship between dependent variable and all independent variables must be linear. That can be determined by scatterplots whether there is linear or curvilinear. Test of correlation has been used to measure the strength of the relationship between variables.

Table 4.5: p-value between Consumer's Behaviour and Convenience, Website Design/Features, Time Saving and Security

	p-value			
	Convenience (X1)	Website Design /Features (X2)	Time Saving (X3)	Security (X4)
Consumer's Behaviour (Y)	0.000	0.000	0.000	0.000

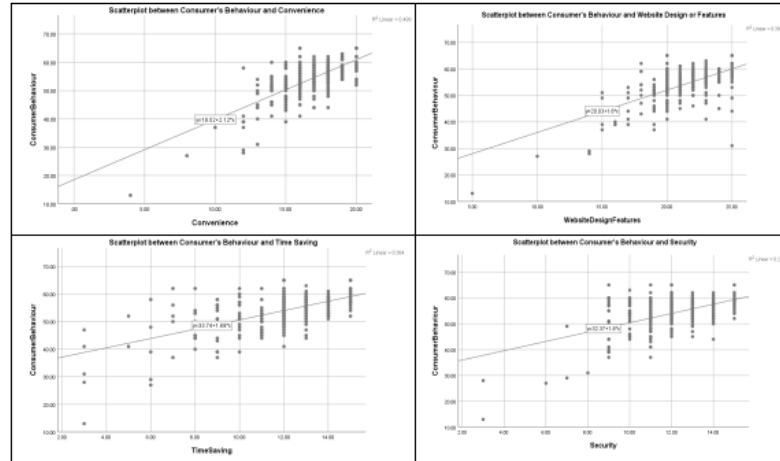


Figure 4.5: Scatterplot of Consumer's Behaviour versus Convenience, Website Design/Features, Time Saving and Security

Table 4.5 shows the relationship between the dependent variable, consumer's behaviour and each of the independent variables which are convenience, website design/features, time saving and security. Figure 4.5 illustrates that there is a linear relationship between consumer's behaviour and convenience, website design/features, time saving and security.

2. Normality of Residuals

Normality assumption must be met to conduct regression analysis. Normal p-p plot was applied in the study to check the normality of the residuals.

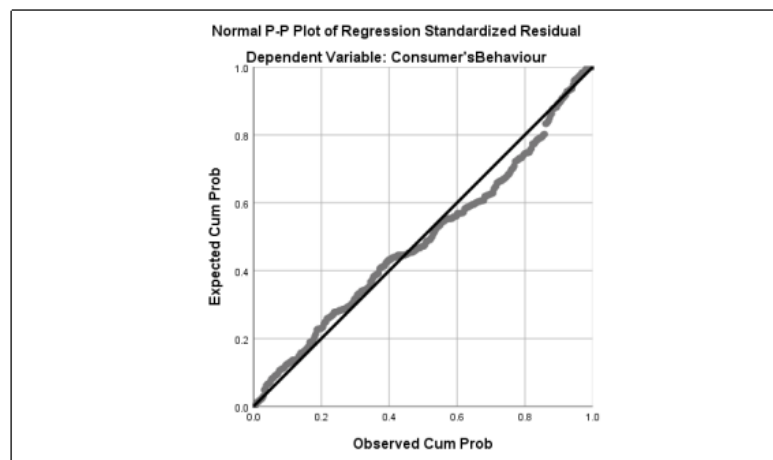


Figure 4.6: Normal P-P of Residuals

Based on normal p-p plot in figure 4.6, residuals are normally distributed since most of the points lies on the straight line.

3. Homogeneity of variance of the Residuals

The residuals must have constant variance to satisfy the homoscedasticity assumption. It can be determined by using scatterplot of residual against predicted value.

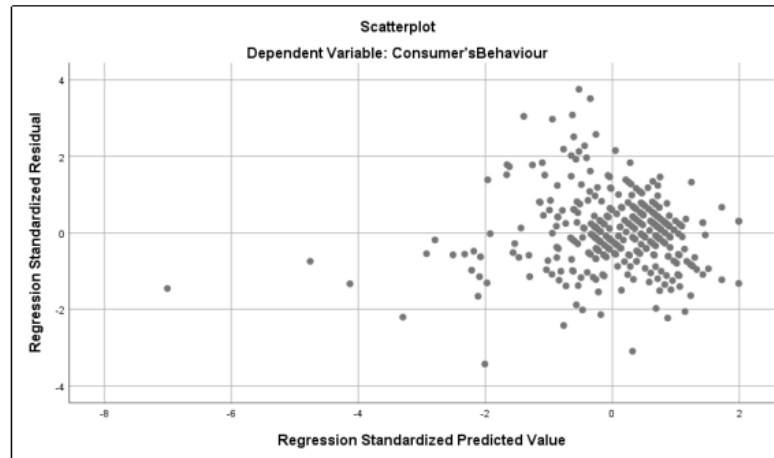


Figure 4.7: Scatterplot of Residual versus Predicted Value

Figure 4.7 illustrates scatterplot of residual versus predicted value. Most of the plotted points are randomly scattered around to zero. That means, the residuals have constant variance and the assumption for homoscedasticity is satisfied.

4. Multicollinearity

Multicollinearity assumption can be defined by Variance Inflation Factor (VIF) and Tolerance values to determine the independent variables are correlated or uncorrelated.

Table 4.6: Multicollinearity Test

Independent Variables	Collinearity Statistics	
	Tolerance	VIF
Convenience	0.541	1.849
Website Design/Features	0.647	1.545
Time Saving	0.737	1.357
Security	0.711	1.407

Table 4.6 shows that all tolerance values are greater than 0.10 and Variance Inflation Factor (VIF) for all independent variables are less than 10. This indicates that there is no multicollinearity exists.

5. Independence of Residuals

Independence of observations can be used Durbin-Watson statistic to detect autocorrelation presence in the residuals.

Table 4.7: Durbin-Watson Statistic

Durbin-Watson
1.966

Table 4.7 represents Durbin-Watson statistic with value 1.966, expected nearly to 2. Therefore, it can be concluded that there is no serial correlation problem in the data. Hence, all the residuals are independent.

4.5.2 Model Evaluation

The unstandardized coefficients table was examined to identify which independent variables that should be included into the model. Each variable is tested based on their significance value.

Table 4.8: Estimated Coefficients of Variables

Variable	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Standard Error	Beta		
(Constant)	6.992	1.968		3.553	0.000
Convenience	1.058	0.132	0.352	8.015	0.000
Website Design/Features	0.676	0.103	0.264	6.580	0.000
Time Saving	0.806	0.105	0.288	7.649	0.000
Security	0.450	0.133	0.130	3.387	0.001
F statistic = 156.839	p-value = 0.000			$R^2 = 0.655$	

Based on the Analysis of Variance (ANOVA) F test, the regression equation is significantly adequate since $F = 156.839$ and p-value is 0.000, less than 0.05. For R^2 , there are 65.5% in the variation in consumer's behaviour can be explained by convenience, website design/features, time saving and security. The remaining 34.5% is explained by other factors. Table 4.8 shows estimated coefficients for each variable. For convenience variable, it has t-value = 8.015 with p-value = $0.000 < 0.05$, website design/features variable has t-value = 6.580 with p-value = $0.000 < 0.05$, time saving variable has t-value = 7.649 with p-value = $0.000 < 0.05$ and security variable has t-value = 3.387 with p-value = $0.001 < 0.05$. Since all independent variables consists of p-value < 0.05 , there is significant to include all independent variables in the model. This indicate to identify the factors that influence consumer's behaviour towards online shopping in Malaysia.

Therefore, the estimated regression model for this study can be written as:

$$y = 6.992 + 1.058X_1 + 0.676X_2 + 0.806X_3 + 0.450X_4$$

where

y = Consumer's Behaviour towards Online Shopping

X_1 = Convenience

X_2 = Website Design/Features

X_3 = Time Saving

X_4 = Security

The unstandardized regression coefficients indicate that the consumer's behaviour score is expected to increase by 1.058 for every one unit increase in convenience score ($\beta_1 = 1.058$). The consumer's behaviour score is expected to increase by 0.676 for every unit

increase in website design/features score ($\beta_2 = 0.676$). Meanwhile, for every one unit increase in time saving score, the consumer's behaviour score is expected to increase by 0.806 ($\beta_3 = 0.806$). Finally, $\beta_4 = 0.450$, indicates that consumer's behaviour score would expected to increase by 0.450 for every unit increase in security score.

By comparing with previous studies, the results obtained in this study support the previous study done by Rudansky-Kloppers (2014) which states that convenience, website design/features, and security contribute toward consumer's behaviour. Other than that, the results found in this study are also consistent with the results found by three other studies that clarified consumer's behaviour depending on security variable, which is through an article written by (Alam & Yasin, 2010; Lee & Lin, 2005; Shaheen, Cheng, & Lee, 2012)

CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.1 CONCLUSION

In conclusion, this research aims to figure out factors influencing consumer's behaviour towards online shopping in Malaysia. By studying much more deeply, this research wants to compare the behaviour towards online shopping between students and workers in Malaysia and identify the factors that influence consumer's behaviour towards online shopping in Malaysia. 335 respondents from online shoppers living in Klang Valley were the selected people required to complete the questionnaire distributed via Microsoft Forms. The findings show that 335 respondents mostly have a positive perception of consumer's behaviour towards online shopping. Therefore, there are no problems occurred while the respondents answered the questionnaire. Using Mann-Whitney U Test indicates no difference between students and workers behaviour towards online shopping. As a result, there will be no concerns with the respondents' employment status since it is not an important factor in determining the behaviour towards online shopping. Following that, this research wants to determine whether these four factors, which are convenience, website design/features, time saving and security influence the consumer's behaviour towards online shopping. The findings of this research indicate that all four factors significantly influence the consumer's behaviour towards online shopping in Malaysia but the main important factor that influence the consumer's behaviour towards online shopping in Malaysia for this research is convenience compared to the other three factors which are time saving, website design/features and security.

5.2 RECOMMENDATION

Future recommendations should be included to enhance this research based on the findings to more profound knowledge. First and foremost, due to the Covid-19 pandemic, more individuals are purchasing online since they are unable to purchase the items they desire. As a result, this research needs to increase the number of respondents for this sample because the population for this study is rather large, mainly consisting of individuals from all states in Malaysia. Aside from that, this research might distribute the questionnaire by conducting a face-to-face survey in the future to make it simpler for the respondents to comprehend the questions and ask the researcher questions they do not understand. Moreover, this research should not be limited to study these four variables only, another variables also can be study to determine whether it will also influence consumer's behaviour towards online shopping in Malaysia. In view of the fact that this topic of research is quite common among people in Malaysia, a talk on the importance and knowledge of online shopping should be highlighted so that the widespread fraud does not easily mislead people.

REFERENCES

- Ahmed, Z., Su, L., Rafique, K., Khan, S. Z., & Jamil, S. (2017). A study on the factors affecting consumer buying behavior towards online shopping in pakistan. *Journal of Asian Business Strategy*, 7(2), 44.
- Alam, S. S., & Yasin, N. M. (2010). An investigation into the antecedents of customer satisfaction of online shopping. *Journal of Marketing Development and Competitiveness*, 5(1), 71–78.
- Barnes, S. J., & Vidgen, R. T. (2002). An integrative approach to the assessment of e-commerce quality. *J. Electron. Commerce Res.*, 3(3), 114–127.
- Bastam, H., Lotfabadi, V., Kouchakzadeh, V., & Faraji, M. (2017). A study of factors affecting consumer buying behaviour in online shopping (case study: Digikala online store). *International Journal of Business and Technopreneurship*, 7(3).
- Bhatti, A., Akram, H., Basit, H. M., Khan, A. U., Raza, S. M., & Naqvi, M. B. (2020). E-commerce trends during covid-19 pandemic. *International Journal of Future Generation Communication and Networking*, 13(2), 1449–1452.
- Bucko, J., Kakalejčík, L., & Ferencová, M. (2018). Online shopping: Factors that affect consumer purchasing behaviour. *Cogent Business & Management*, 5(1), 1535751.
- Chuah, S. C., Ng, P. L., & Khan, N. R. M. (2018). Compulsive online shopping in malaysia. *Advances in Business Research International Journal*, 4(2), 1–8.
- Chusminah, S., Sugiyah, S., Haryati, R. A., & Lestari, R. (2020). Factors influencing online buying behaviour of millennial generation. In *Proceeding of lppm upn “veteran” yogyakarta conference series 2020—economic and business series* (Vol. 1, pp. 165–171).
- Dani, N. J. (2017). A study on consumers’ attitude towards online shopping. *International Journal of Research in Management & Business Studies*, 4(3), 42–46.

- Delafrouz, N., Paim, L. H., Haron, S. A., Sidin, S. M., & Khatibi, A. (2009). *Factors affecting students' online shopping attitude and purchase intention* (Unpublished doctoral dissertation). Universiti Putra Malaysia.
- Eroglu, E. (2014). The changing shopping culture: Internet consumer behavior. *Review of Business Information Systems (RBIS)*, 18(1), 35–40.
- Harn, A. C. P., Khatibi, A., & Ismail, H. b. (2006). E-commerce: A study on online shopping in malaysia. *Journal of Social Sciences*, 13(3), 231–242.
- Herceg, K. T. (2020). Impact of covid-19 pandemic on online consumer behavior in croatia. In *Online conference* (p. 47).
- Isohella, L., Oikarinen, E.-L., Saarela, M., Muhos, M., Nikunen, T., et al. (2017). Perceptions of digital marketing tools in new microenterprises. In *Management challenges in a network economy: Proceedings of the makelearn and tiim international conference* (pp. 85–95).
- Jarvenpaa, S. L., Tractinsky, N., & Vitale, M. (2000). Consumer trust in an internet store. *Information technology and management*, 1(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.
- Kasuma, J., Kanyan, A., Khairol, M., Sa'ait, N., & Panit, G. (2020). Factors influencing customers intention for online shopping'. *International Journal of Modern Trends in Business Research*, 3(11), 31–41.
- Katawetawaraks, C., & Wang, C. (2011). Online shopper behavior: Influences of online shopping decision. *Asian journal of business research*, 1(2).
- Kim, G., Shin, B., & Lee, H. G. (2009). Understanding dynamics between initial trust and usage intentions of mobile banking. *Information Systems Journal*, 19(3), 283–311.
- Kiu, C.-C., & Lee, C.-S. (2017). E-commerce market trends: a case study in leveraging web 2.0 technologies to gain and improve competitive advantage. *International Journal*

- of Business Information Systems*, 25(3), 373–392.
- Koran, L. M., Faber, R. J., Aboujaoude, E., Large, M. D., & Serpe, R. T. (2006). Estimated prevalence of compulsive buying behavior in the united states. *American Journal of Psychiatry*, 163(10), 1806–1812.
- Lee, G.-G., & Lin, H.-F. (2005). Customer perceptions of e-service quality in online shopping. *International Journal of Retail & Distribution Management*.
- Nguyen, L., Nguyen, T. H., & Tan, T. K. P. (2021). An empirical study of customers' satisfaction and repurchase intention on online shopping in vietnam. *The Journal of Asian Finance, Economics, and Business*, 8(1), 971–983.
- Omar, G. (2000). *E-commerce: A study on internet shopping in malaysia* (Unpublished doctoral dissertation). Multimedia University.
- Pinto, F., Santos, M. F., & Marques, A. (2009). Database marketing intelligence supported by ontologies. *WSEAS Transactions on Business and Economics*, 1, 21–42.
- Rahman, M. A., Islam, M. A., Esha, B. H., Sultana, N., & Chakravorty, S. (2018). Consumer buying behavior towards online shopping: An empirical study on dhaka city, bangladesh. *Cogent Business & Management*, 5(1), 1514940.
- Rashid, N. A. N. H., Yusof, Z. M., Misiran, M., & Mahmuddin, M. (2019). Factors that influence online purchasing behavior among students in universiti utara malaysia. *Asian Journal of Education and Social Studies*, 1–10.
- Rohm, A. J., & Swaminathan, V. (2004). A typology of online shoppers based on shopping motivations. *Journal of business research*, 57(7), 748–757.
- Rudansky-Kloppers, S. (2014). Investigating factors influencing customer online buying satisfaction in gauteng, south africa. *International Business & Economics Research Journal (IBER)*, 13(5), 1187–1198.
- Shah, M. H., Peikari, H. R., & Yasin, N. M. (2014). The determinants of individuals' perceived e-security: Evidence from malaysia. *International Journal of Information Management*, 34(1), 48–57.

- Shaheen, M., 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.
- Taherdoost, H. (2016). Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research. *How to test the validation of a questionnaire/survey in a research (August 10, 2016)*.
- Usman, M. U., & Kumar, P. (2020). Factors influencing consumer intention to shop online in nigeria: a conceptual study. *Vision*, 0972262920926797.
- Valim, M. D., Marziale, M. H. P., Hayashida, M., Rocha, F. L. R., & Santos, J. L. F. (2015). Validity and reliability of the questionnaire for compliance with standard precaution. *Revista de Saúde Pública*, 49, 87.
- Vazifehdust, H., & Eskandarnia, D. (2012). Customer perceptions of e-service quality in online shopping. *Future study Management*, 23(94-95), 27–42.
- Wai, K., Dastane, O., Johari, Z., & Ismail, N. B. (2019). Perceived risk factors affecting consumers' online shopping behaviour. *The Journal of Asian Finance, Economics and Business*, 6(4), 246–260.
- Wen, T. S., Satar, N., Ishak, N. A., & Ating, R. (2020). Consumer intention towards online shopping in malaysia. *International Journal of Accounting*, 5(27), 93–117.

APPENDIX A: GANTT CHART

Gantt Chart of Research Activities, Milestones and Dates

Year	2021				
Final Year Project activities	February	March	April	May	June
1. Project briefing					
2. Writing up a proposal (Chapter 1, 2 and 3)					
3. Formatting proposal					
4. Proofread proposal					
5. Submission final proposal					
Year	2022				
Activities (Milestone)	September	October	November	December	January
1. Complete data collection					
2. Complete writing up a proposal (Chapter 1, 2 and 3)					
3. Complete formatting proposal					
4. Complete proofread proposal					
5. Project completion and submission					

APPENDIX B: RESEARCH QUESTIONNAIRE

QUESTIONNAIRE ON FACTORS INFLUENCING CONSUMERS BEHAVIOR TOWARDS ONLINE SHOPPING IN MALAYSIA

**SOAL SELIDIK MENGENAI FAKTOR-FAKTOR YANG MEMPENGARUHI TINGKAH
LAKU PENGGUNA TERHADAP MEMBELI-BELAH DALAM TALIAN DI MALAYSIA**



Assalamualaikum,

We are students of Bachelor of Statistical Sciences (CS241) from UiTM Seremban, Faculty of Computer and Mathematical Sciences. The purpose of this study is to investigate the factors influencing consumers behavior towards online shopping. This study conducts research on consumer online behavior in Klang Valley. We would like to know your honest answers and take your time in answering each question. Your response will be used only for academic purposes and will be only seen by the research team. Thank you for your time and cooperation.

Assalamualaikum,

Kami adalah pelajar Sarjana Muda Sains Statistik (CS241) dari UiTM Seremban, Fakulti Sains Komputer dan Matematik. Tujuan kajian ini adalah untuk mengkaji faktor-faktor yang mempengaruhi tingkah laku pengguna terhadap membeli-belah dalam talian. Kajian ini menjalankan penyelidikan mengenai tingkah laku pengguna dalam talian di Lembah Klang. Kami ingin mengetahui jawapan anda yang jujur dan mengambil sedikit masa anda untuk menjawab setiap soalan. Maklum balas anda hanya akan digunakan untuk tujuan akademik dan hanya akan dilihat oleh pasukan penyelidikan. Terima kasih atas masa dan kerjasama anda.

INSTRUCTIONS:

This questionnaire consists of 3 parts, which are part A, part B and part C. Please answer all questions by ticking the boxes provided.

ARAHAN:

Soal selidik ini terdiri daripada 3 bahagian, iaitu bahagian A, bahagian B dan bahagian C. Sila jawab semua soalan dengan menandakan kotak yang disediakan.

PART A: DEMOGRAPHIC INFORMATION

BAHAGIAN A: MAKLUMAT DEMOGRAFI

1) AGE/*UMUR*

- ☐ 18-30 years old/*18-30 tahun*
☐ 30-50 years old/*30-50 tahun*
☐ 50 years old and above/*50 tahun*

2) GENDER/*JANTINA*

- ☐ Male/*Lelaki*
☐ Female/*Perempuan*

3) OCCUPATION/*PEKERJAAN*

- ☐ Full-Time Student/*Pelajar Sepenuh*
☐ Self-Employed/*Bekerja Sendiri*
☐ Part-Time Student/*Pelajar Separuh Masa*
☐ Private Sector/*Sektor Swasta*
☐ Government Sector/*Sektor Kerajaan*
☐ Retired/*Bersara*
☐ Other/*Lain-lain*: _____

4) RACE/*BANGSA*

- ☐ Malay/*Melayu*
☐ Chinese/*Cina*
☐ Indian/*India*
☐ Other/*Lain-*

5) EDUCATION LEVEL/*TAHAP PENDIDIKAN*

- ☐ Diploma/*Diploma*
☐ Bachelor's/*Sarjana Muda*
☐ Master's/*Sarjana*
☐ PHD/*PHD*
☐ Other/*Lain-lain*: _____

6) MARITAL STATUS/*STATUS PERKAHWINAN*

- ☐ Single/*Bujang*
☐ Married/*Berkahwin*
☐ Divorced/*Berceraai*

7) MONTHLY INCOME/*Pendapatan Bulanan*

- ☐ Below RM 1,000/*Bawah RM1,000*
☐ RM 1,000 - RM 1,999
☐ RM 2,000 - RM 2,999
☐ RM 3,000 - RM 3,999
☐ RM 4,000 and above/*RM 4,000 dan ke atas*

PART B:

BAHAGIAN B:

In this part, the question is based on consumer's behavior towards online shopping in Malaysia. Please read each of the following statements and select a scale of 1, 2, 3, 4 or 5 that indicates how much you agree with the statement.

Pada bahagian ini, soalnya berdasarkan tingkah laku pengguna terhadap membeli-belah dalam talian di Malaysia. Sila baca setiap pernyataan berikut dan pilih skala 1, 2, 3, 4 atau 5 yang menunjukkan seberapa banyak anda bersetuju dengan pernyataan tersebut.

1-strongly disagree, 2-disagree, 3-neutral, 4-agree, 5-strongly agree

1-sangat tidak setuju, 2-tidak setuju, 3-netral, 4-setuju, 5-sangat setuju

No. Bilangan	Item Perkara	1	2	3	4	5
CONSUMER BEHAVIOR / TINGKAH LAKU PENGGUNA						
1.	You are overall satisfied with your experience of shopping online. <i>Anda secara keseluruhan berpuas hati dengan pengalaman anda membeli-belah dalam talian.</i>					
2.	Shopping through the internet makes information available at any time of the day. <i>Membeli-belah melalui internet menjadikan maklumat tersedia pada bila-bila masa sepanjang hari.</i>					
3.	I recommend good online shopping to my family and my friends. <i>Saya mengesyorkan membeli-belah dalam talian yang baik kepada keluarga dan rakan saya.</i>					
4.	There are more choices offered through online shopping than conventional shopping.					

	<i>Terdapat lebih banyak pilihan yang ditawarkan melalui membeli-belah dalam talian daripada membeli-belah konvensional.</i>					
5.	Based on my experience with online shopping in the past, I know it provides good service. <i>Berdasarkan pengalaman saya dengan membeli-belah dalam talian pada masa lalu, saya tahu ia memberikan perkhidmatan yang baik.</i>					
6.	I will continue to be loyal to the online stores that I am satisfied with. <i>Saya akan terus setia di kedai dalam talian yang saya berpuas hati.</i>					
7.	I shop online because the homepage of the online store is personalised or customised to my needs. <i>Saya membeli-belah secara dalam talian kerana laman utama kedai dalam talian diperibadikan atau disesuaikan dengan keperluan saya.</i>					
8.	I will continue to shop online for a long terms. <i>Saya akan terus membeli-belah dalam talian untuk jangka masa panjang.</i>					
9.	I prefer to buy lower cost products online to reduce risk. <i>Saya lebih suka membeli produk kos rendah dalam talian untuk mengurangkan risiko.</i>					
10.	I have sufficient information and experience of the product to enable me to purchase it with confidence without physical inspection. <i>Saya mempunyai maklumat dan pengalaman tentang produk yang mencukupi untuk membolehkan saya membelinya dengan yakin tanpa pemeriksaan fizikal.</i>					
11.	I find online shopping convenient. <i>Saya mendapati berbelanja dalam talian memudahkan.</i>					
12.	I have a stronger willingness to buy online when I am having enjoyable online shopping experiences.					

	<i>Saya mempunyai persediaan yang lebih kuat untuk membeli dalam talian ketika saya mengalami pengalaman membeli-belah dalam talian yang menyeronokkan.</i>					
13.	I often consider shopping online. <i>Saya sering mempertimbangkan membeli-belah dalam talian.</i>					

PART C:

BAHAGIAN C:

In this part, the question is based on our third objective which is to determine the factors influencing consumer's behavior towards online shopping in Malaysia. Please read each of the following statements and select a scale of 1, 2, 3, 4 or 5 that indicates how much you agree with the statement.

1-strongly disagree, 2-disagree, 3-neutral, 4-agree, 5-strongly agree

Pada bahagian ini, soalnya berdasarkan pada objektif ketiga kami iaitu untuk menentukan faktor-faktor yang mempengaruhi tingkah laku pengguna terhadap membeli-belah dalam talian di Malaysia. Sila baca setiap pernyataan berikut dan pilih skala 1, 2, 3, 4 atau 5 yang menunjukkan seberapa banyak anda bersetuju dengan pernyataan tersebut.

1-sangat tidak setuju, 2-tidak setuju, 3-netral, 4-setuju, 5-sangat setuju

No. <i>Bilangan</i>	Item <i>Perkara</i>	1	2	3	4	5
CONSUMER BEHAVIOR / TINGKAH LAKU PENGGUNA						
CONVENIENCE						
KEMUDAHAN						
1.	I get on-time delivery by shopping online. <i>Saya mendapat penghantaran tepat pada masanya dengan membeli-belah dalam talian.</i>					
2.	Detail information is available while shopping online. <i>Maklumat terperinci tersedia semasa membeli-belah dalam talian.</i>					
3.	I can buy the products anytime 24 hours a day while shopping online.					

	<i>Saya boleh membeli produk tersebut pada bila-bila masa 24 jam sehari semasa membeli-belah dalam talian.</i>					
4.	It is easy to choose and make comparisons with other products while shopping online. <i>Ia sangat mudah untuk memilih dan membuat perbandingan dengan produk lain semasa membeli-belah dalam talian.</i>					
WEBSITE DESIGN / FEATURES REKA BENTUK/KEMUDAHAN LAMAN WEB						
5.	The website design helps me in searching the products easily. <i>Reka bentuk laman web membantu saya mencari produk dengan mudah.</i>					
6.	While shopping online, I prefer to purchase from a website that provides safety and ease of navigation and order. <i>Semasa membeli-belah dalam talian, saya lebih suka membeli dari laman web yang memberikan keselamatan dan kemudahan navigasi dan pesanan.</i>					
7.	The website layout helps me in searching and selecting the right product while shopping online. <i>Susun atur laman web membantu saya dalam mencari dan memilih produk yang sesuai semasa membeli-belah dalam talian.</i>					
8.	I believe that familiarity with the website before making an actual purchase reduces the risk of shopping online. <i>Saya percaya bahawa keserasian dengan laman web sebelum membuat pembelian dapat mengurangkan risiko membeli-belah dalam talian.</i>					
9.	I prefer to buy from websites that provide me with quality of information.					

	<i>Saya lebih suka membeli dari laman web yang memberi saya kualiti maklumat.</i>					
TIME SAVING MENJIMATKAN MASA						
10.	Online shopping takes less time to purchase. <i>Membeli-belah dalam talian memerlukan lebih sedikit masa untuk membeli.</i>					
11.	Online shopping doesn't waste time. <i>Membeli-belah dalam talian tidak membuang masa.</i>					
12.	I feel that it takes less time in evaluating and selecting a product while shopping online. <i>Saya merasakan bahawa memerlukan lebih sedikit masa dalam menilai dan memilih produk semasa membeli-belah dalam talian.</i>					
SECURITY KESELAMATAN						
13.	I feel safe and secure while shopping online. <i>Saya berasa selamat dan selamat semasa membeli-belah dalam talian.</i>					
14.	Online shopping protects my security. <i>Membeli-belah dalam talian melindungi keselamatan saya.</i>					
15.	I like to shop online from a trustworthy website. <i>Saya suka membeli-belah dalam talian dari laman web yang boleh dipercayai.</i>					

APPENDIX C: ETHICS APPROVAL

www.uitm.edu.my



Cawangan Negeri Sembilan
Kampus Kuala Pilah

Reference : 100-KNS(PJ.9/19)

Date : 26 August 2021

Faculty of Computer & Mathematical Sciences
Universiti Teknologi MARA
Kampus Seremban
Persiaran Seremban Tiga/1, Seremban 3
73000 Seremban
Negeri Sembilan

Dear Sir/ Madam

ETHICS APPROVAL BY UiTM RESEARCH ETHICS COMMITTEE

Thank you for submitting your research ethics application. We would like to inform that the UiTM Cawangan Negeri Sembilan had deliberated your proposal.

It is our pleasure to inform you that the Research Ethics Committee has agreed to grant an ethics approval for the said study. Kindly refer to the Attachment 1 below for the approval code of the study and validity period is from 25th August 2021 – 24 August 2022.

Please submit a progress report of the study to the REC Secretariat 12 months from the date of this approval letter, and annually until the study has been completed. Amendments to the study documents are to be submitted to the REC for approval. A final report must also be submitted to the REC at the end of the said study.

The UiTM Cawangan Negeri Sembilan operates in accordance to the ICH Good Clinical Practice Guidelines, Malaysia Good Clinical Practice Guidelines and the Declaration of Helsinki.

If you require further information, please contact REC Secretariat of each campus,
(Kuala Pilah : Dr. Eddie Tan Ti Tjih (eddietan@uitm.edu.my) / Seremban : Puan Wahidah Tumijan (wahidah06@uitm.edu.my) / Rembau : Intan Nurbaizura Zainuddin (intan422@uitm.edu.my)).

Thank you.

Yours truly,


PROF. DR. YAMIN YASSIN
Rector
UiTM Cawangan Negeri Sembilan

Pejabat Penyelidikan, Jaringan Industri,
Masyarakat & Alumni
Office of Research, Industrial Linkages, Community &
Alumni Network

Universiti Teknologi MARA
Cawangan Negeri Sembilan
Kampus Kuala Pilah
Pekan Parit Tinggi, 72000 Kuala Pilah
Negeri Sembilan Darul Khusus.
Tel : 06-483 2399
Faks : 06-484 2449/2303
<https://nsembilan.uitm.edu.my/v1/>



8	REC/20/2021	FACTOR OF CYBERBULLYING IN UITM SEREMBAN 3	NURNISA NABILA BINTI AZLINSHAH	MUHAMMAD HILMI BIN SAMIAN	Minimal risk research.
9	REC/21/2021	SLEEP QUANTITY, TYPE OF ROOM AND ITS EFFECT ON ACADEMIC PERFORMANCE	MUHAMMAD AL-AMIN BIN FAUZI	NOOR AISYAH BINTI IDRIS	Minimal risk research.
10	REC/22/2021	FACTORS OF SLEEP AND STRESS LEVEL AMONG WORKING ADULTS IN JOHOR BAHRU	ANIS NADIRAH BINTI MOHD.NOOR	NOOR AISYAH BINTI IDRIS	Minimal risk research.
11	REC/23/2021	FACTORS OF EATING DISORDER AMONG ADOLESCENTS	FARIZAH HANIM BINTI ZULKEFLEY	NOR AKMAL BINTI MD NOH	Minimal risk research.
12	REC/24/2021	FACTORS INFLUENCING GRADUATE EMPLOYABILITY AT A HIGHER EDUCATION INSTITUTION IN MALAYSIA: A CASE STUDY IN UITM CAWANGAN NEGERI SEMBILAN KAMPUS SEREMBAN	MUHAMMAD AZRY FAHMI BIN BAHRIN	NOR AKMAL BINTI MD NOH	Minimal risk research.
13	REC/25/2021	FACTORS INFLUENCING CONSUMER'S BEHAVIOR TOWARDS ONLINE SHOPPING IN MALAYSIA	NURUL AMIRA BINTI ROHI'SHAM	NORNADIAH BINTI MOHD RAZALI	Minimal risk research.
14	REC/26/2021	QUALITY OF LIFE DURING COVID-19 AMONG UITM STAFF: CASE STUDY ON SEREMBAN CAMPUS	MOHAMAD SYAHMI BIN RAZAK	NORNADIAH BINTI MOHD RAZALI	Minimal risk research.
15	REC/27/2021	INVESTIGATING THE EFFECTS OF VIRAL MARKETING TOWARDS ONLINE PURCHASING	NUR SABRINA NISA NOR AMRI	NUR IZZAH BINTI JAMIL	Minimal risk research.
16	REC/28/2021	FACTORS AFFECTING CUSTOMER SATISFACTION TOWARDS COURIER SERVICES	NUR ATIQAHH IZZATI BINTI HASSAN	NUR IZZAH BINTI JAMIL	Minimal risk research.
17	REC/29/2021	THE EFFECT OF INTERNET USAGE TOWARDS ACADEMIC PERFORMANCE AMONG UITM SEREMBAN 3 STUDENTS	NURUL SYAFIQAH BINTI HASBULLAH HAFIDZ	NUR IZZAH BT JAMIL	Minimal risk research.
18	REC/30/2021	FACTOR AFFECTING SAVING HABITS AMONG FSKM STUDENTS OF	DANIAL ISKANDAR BIN MOHAMAD ZAILANI	NURALINA BINTI AZLAN	Minimal risk research.